

Final Report

**Baseline Socioeconomic Profile
Richfield Field Office
Resource Management Plan /
Environmental Impact Statement**



Bureau of Land Management
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Richfield, UT 84601

Salt Lake City, UT
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*This report is confidential and intended solely for the use and
information of the agency to whom it is addressed.*

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Introduction to the Socio-Economic Profile

The Bureau of Land Management's (BLM) Richfield Field Office (RFO) manages 2.2 million acres of public land in south central Utah, including all public land in Sanpete, Sevier, Piute, and Wayne counties, and parts of Garfield County. In addition, the RFO manages the Federal mineral estate on those portions of the Uinta, Fishlake, Manti-LaSal, and Dixie National Forests that fall within the RFO boundary.

The economic study area, which is area of analysis for the socio-economic profile, includes the total land area of in Sanpete, Sevier, Piute, Wayne, and Garfield counties. The total land area is included in the socio-economic analysis because statistics are generally reported by county. Thus, figures shown for Garfield County may not accurately represent the situation in the largely unpopulated and undeveloped part of the county managed by the Richfield Field Office.

While some resources managed by the RFO may be of regional or national interest, this study assumes that that RFO management decisions primarily affect the economies of the counties and towns within the field office boundary. The purpose of this socio-economic profile is to establish baseline information that will be used to help analyze the alternatives considered in the environmental impact statement for the resource management plan.



1.0 Overview of the Economic Study Area

The counties within the RFO planning area fall within two physiographic provinces: the Utah High Plateaus, which includes Sanpete, Sevier and Piute counties and the Antimony portion of Garfield County, and the Colorado Plateau, which includes Wayne County, northeastern Sevier County east of the Fishlake National Forest and the Awapa Plateau and Henry Mountain/Dirty Devil portions of Garfield County. Physiographic provinces are large areas of land defined by similar geology and landforms. Coincidentally, the study area counties included in each of the two provinces also share common settlement patterns, history, culture, and economics.

About 85 percent of the people residing in the economic study area live in the Utah High Plateaus province in the communities and farms situated along the Sevier and Sanpete Rivers and their tributaries. The amount of public land in these counties is relatively small and is generally relegated to the parcels leftover after the farms and communities were settled in the valleys and the mountains were withdrawn from the public domain as forest reserves—now national forests—in order to protect the watersheds from overgrazing.

In contrast, the Colorado Plateau portion of the study area is very sparsely populated due to its isolation, aridity, and ruggedness. Its scenery is world famous and some of the best is included in Capitol Reef National Park, Glen Canyon National Recreation and the BLM wilderness study

areas. Little land in this area is private and most remains in public ownership, managed by Federal or state government agencies, particularly the BLM. Table 1-1 presents geographic information; Figures 1-1 and 1-2 present land ownership patterns; and Figure 1-3 and Table 1-2 present population information.

All five counties in the economic study area have strong cultural ties to the Mormon pioneers who settled the area and the influence of these pioneers remains strong today. Between 96 and 100 percent of residents claiming a religion in the five counties claim to be members of the Church of Jesus Christ Latter Day Saints (Salt Lake Tribune, 2002).

The pioneers supported themselves by irrigating the valleys, running livestock on the rangelands and, to a lesser extent, mining and lumbering. Today, few families earn their livelihoods solely from these basic industries. However, the descendents of these pioneers still have strong connections to the land. Many of the current livestock permittees are heirs of families who have grazed the public land for generations. Access to public land and resources, whether for earning a living or for recreating, is important to the local people.

1.1 The Utah High Plateau Counties: Piute, Sanpete and Sevier Counties

European settlement came early to the Sevier-Sanpete Valley when Mormon pioneers established Manti, now the county seat of Sanpete County, in 1849. Richfield, the Sevier County seat, was settled in 1863 and Junction, the Piute County seat, was settled in 1864. Today there are 28 incorporated towns and several unincorporated communities in the three counties. Sanpete County possesses Utah's greatest treasury of architecturally significant buildings from the pioneer and early twentieth century. Spring City, listed on the National Register of Historic Places, showcases this era. Passage of the "National Mormon Pioneer Heritage Area Act," which is currently being introduced before the U.S. Senate, would give the area special recognition. Piute County was named for the Paiute Indians, Sanpete County for the San Pitch Indians, and Sevier County for the Rio Severo, meaning "severe river" in Spanish. The Deseret Telegraph in the 1870s, the Marysvale Branch of the Denver and Rio Grande Railroad in the 1890s, US Highway 89 in the 1920s and Interstate 70 in the 1980s connected the three counties with one another and/or the outside world (Haymond, 1996b,c; Murphy, 1996b; Peterson, 1996a,b; Roberts, 1996).

Population

Population in the three counties totals 43,040 and represents about two percent of Utah's population of 2,233,169 (see Table 1-1). Ethnicity in the study area is predominately white (95 percent). Hispanics represent the largest minority (less than four percent) (see Figure 1-4).

Piute County totals 758 square miles. In 2000, its population was 1,435 making it Utah's second smallest county in both land area and population. The population density in Piute County is 1.9 persons per square mile. The median age is 38.9 years, which ranks 27th among Utah counties.

Sanpete County totals 1,588 square miles and its population in 2000 was 22,763, making it the largest county among the study area counties. The population density in Sanpete County is 14.3 persons per square mile. The median age is 25.3 years, which ranks fourth among Utah counties.

Sevier County totals 1,910 square miles and its population in 2000 was 18,842. The population density is 9.9 persons per square mile. The median age is 30.3 years, ranking 18th among Utah counties.

Employment

Between 1990 and 2000, employment in the economic study area increased by more than 50 percent. This growth rate exceeds the national rate, but lags behind the Utah growth rate (as discussed in Section 7.0)

In 2000, over 35 percent of the Piute County's employment and over 24 percent of its earnings were attributable to agriculture. Federal, state and local governments provided 26 percent of the county's jobs and 38.3 percent of the earnings. Retail trade provided 11 percent of the county's jobs, but only 4.7 percent of the earnings (BEA, 2002; Sonoran, 2002).

Federal, state, and local governments provided 20 percent of the jobs in Sanpete County and nearly a third of the county's earnings in 2000. Many of these jobs were attributable to Snow College. Employment in the service sector provided 19 percent of the jobs and over 16 percent of the earnings. Manufacturing provided over 11 percent of the county's employment and 12 percent of its earnings. Agriculture provided 10 percent of the jobs and over 11 percent of the earnings (BEA, 2002; Sonoran, 2002).

In 2000, service sector employment provided 23 percent of Sevier County's jobs and over 20 percent of its earnings. Federal, state, and local governments supplied 17 percent of jobs, and over 23 percent of earnings. Retail trade accounted for over 19 percent of Sevier County's employment and over 11 percent of its earnings (BEA, 2002; Sonoran, 2002).

Agriculture

There are 660 farms totaling 551,289 acres in the three county study area. By comparison, there are 5,987 farms in Utah totaling 12,024,661 acres (USDA, 1997). As elsewhere, agriculture has changed over time in the Sevier-Sanpete Valley. Abandoned creameries and sugar beet factories and collapsed potato cellars are evidence of past agriculture endeavors.

The major source of agricultural income in Piute County is beef cattle. Dairy cattle and sheep also contribute to the economy (Piute County, 2002). The county's 79 farms total 44,540 acres, placing it second to last among Utah counties in farmed land.

Sanpete County's economy has long been agriculture based. The county is now among the top ten turkey-producing counties in the United States. Grain, sheep dairy farming and sugar beets all played important roles in the past (Utah 2002). Sanpete's 383 farms total 359,717 acres, placing it eleventh among Utah counties in acres farmed (USDA, 1997). Cash receipts for livestock and livestock products totaled \$89.3 million in 2001 (Table 1-3).

In Sevier County, sheep and cattle remain important to the local economy as do dairy products, field crops, and in recent years, raising turkeys (Utah, 2002). Sevier's 198 farms total 147,032 acres ranking it nineteenth in Utah in acres farmed (USDA, 1997). Cash receipts for livestock and livestock products totaled \$ 34.9 million in 2001 (Table 1-3).

Mining

In 2000, mining provided 1.5 percent of the jobs, 3.1 percent of the earnings and the highest average earnings per job in the study area (Figures 1-5, 1-6, and 1-7).

Mining is currently on the “bust” side of the “boom or bust” cycle in Piute County, but it once played an important role economic. A gold and silver boom in the Tushar Mountains in the 1890s and early twentieth century spawned the towns of Bullion, Kimberly and Marysvale. Later, lead, zinc, alunite and uranium were mined (Utah, 2002). Small amounts of oil and natural gas were produced in Sanpete County in the late 1990s and in 2001 (Tables 1-4 and 1-5). Utah’s most productive coalmine, the Sufco Mine in Salina Canyon, is located in Sevier County. The county is the third highest producer of coal in the state. The coal industry supports a substantial trucking industry and other infrastructure (Busk, 2001). Coal production in 2001 totaled 6.1 million tons valued at \$ 108.5 million (Table 1-6). Sevier County is Utah’s leading producer of gypsum, although one of two local processing plants closed in 2002 (Utah, 2002). Salt mined in Redmond is marketed as gourmet table salt.

Recreation and Tourism

Public lands provide recreational opportunities for both local residents and tourists from outside the area who spend money in the retail and service sectors while visiting here. The Paiute ATV trail system is a unique motorized recreation opportunity in Sevier and Piute counties (and neighboring Beaver and Millard counties). Its network of trails cross-mountain ranges, canyons, and deserts, and link the local communities with public lands and national forests. The Paiute trail system was rated one of the best 15 trails in the country by Dirt Wheels magazine (Piute County, 2002). Other visitor attractions include the Manti Temple, state parks at Yuba, Piute and Otter Creek reservoirs, the celebrated-in-song Big Rock Candy Mountain, and the Fishlake National Forest’s namesake, Fish Lake, a recreation mecca for generations of Utah families.

County Perspectives

The following statements, taken from county general plans, communicate county perspectives and the management of public lands occurring in the three-county area.

Piute County: “...it is in the county’s best interest that BLM and USFS lands be managed for multiple use [and] access is maintained on public lands” (Piute, 1994).

Sanpete County: “The culture and sentiment of Sanpete County residents is such that they...will want input on the management and use of public lands in the county” (Sanpete, 1997).

Sevier County: “Multiple use activities on public lands in Sevier County should continue and should include uses such as, agricultural grazing, fishing and hunting, mineral exploration and mining, recreation, wildlife habitat and timber sales...” (Sevier, 1998).

1.2 The Colorado Plateau Counties: Wayne and Eastern Garfield Counties

Most of the population in Wayne and Eastern Garfield Counties resides west of Capitol Reef National Park and along the Fremont River in farming communities, including Bicknell, Fremont,

Grover, Loa, Lyman, Teasdale, and Torrey. Only a few isolated small towns and ranches lie east of Capitol Reef National Park. Loa, the capital seat of Wayne County, was established in 1878. Hanksville, first known as Graves Valley, was settled in 1882. Garfield County was named for President James A. Garfield. Wayne County was named for Wayne Robison, a state legislator's son. Outlaw Butch Cassidy and his gang occasionally hid out in eastern Wayne County's Robber's Roost country in the late 1800s. John Wesley Powell explored the area in the 1860s and 1870s discovering and naming the Dirty Devil River and Henry Mountains (Barton, 1996; Murphy, 1996a,c; Webb, 1996, Williams, 1996a,b).

Land Area and Demographics

Wayne County totals 2,460 square miles. Its 2000 population was 2,509, giving it a population density of just one person per square mile, second to last among Utah's 29 counties. Garfield County includes 5,174 square miles and reported a 2000 population of 4,735, giving it a population density of 0.9 people per square mile, last among Utah counties (Table 1-2.) Median age in Garfield County is 33.8 years in Wayne County is 34.1 years, ranking the two counties 23rd and 24th, respectively, among all Utah counties.

Employment

In Wayne County, Federal, state, and local governments provided 16.8 percent of the jobs and 28 percent of the county's labor earnings. Farms provided 15 percent of the county's total jobs and over 13 percent of the earnings. The retail trades provided over 17 percent of the jobs and 7.8 percent of the personal earning (BEA, 2002; Sonoran, 2002). Most of Garfield County's jobs are in the populated area west of the RFO boundary.

Agriculture

There are 100 farms in Wayne County totaling 59,593 acres, placing it 27th among 29 Utah counties in land farmed. There are 116 farms in Garfield County totaling 121,381 acres, most located in western Garfield County outside the RFO boundary (USDA, 1997). The raising of livestock is one of the Wayne County's oldest industries and is still culturally important. Beef cattle produce the most income, but dairy cows, sheep, and poultry have all contributed to the local economy in the past (Utah, 2002). Cash receipts for livestock and livestock products raised in Wayne County totaled \$13.6 million in 2001 (Table 1-3).

Mining

Mining here is very limited (Utah 2002). Coalfields west of the Henry Mountains were worked intermittently between 1888 and 1945. The only mineral ever mined in large quantities in the Henry Mountains was uranium. Mines first opened before World War I. A uranium processing facility was built at the settlement of Ticaboo in the late 1970s, but shut down shortly thereafter when the price of processed uranium fell (Webb, 1996).

Recreation and Tourism

The area's remarkable red rock scenery was first known as the "Wayne Wonderland." In 1937, at the urging of the Utah Legislature, President Franklin D. Roosevelt established Capitol Reef National Monument. In 1969, President Lyndon Johnson expanded the monument and in 1971,

Congress designated it a national park (Haymond, 1996a). The Capitol Reef National Park and Glen Canyon National Recreation Area are internationally known visitor attractions. Park visitors support a burgeoning tourist trade in Torrey and travelers to Lake Powell help support Hanksville's economy. The BLM wilderness study areas (WSAs)—including the Dirty Devil canyons and parts of the Henry Mountains—attract a variety of recreationists from canyoneers to bison hunters. Legislation to formally designate the WSAs and adjacent areas as wilderness has been introduced in Congress under the title "America's Redrock Wilderness Act." Thousand Lake Mountain and Boulder Mountain (Aquarius Plateau) are popular local recreation destinations. Highway 24 is a state scenic byway and Highway 12 is a Federally-designated All-American Road.

County Perspectives

The following statements, taken from county general plans, communicate county perspectives and the management of public lands occurring in the two-county area.

Garfield County: "...the county deems it critical that resource management plans provide for range improvements, current grazing on public lands be preserved, county water rights be maintained, and public lands timber harvesting be continued and mining leases be considered and encouraged" (Garfield, 1998).

Wayne County: "...it is the county's desire that each resource be managed for the optimal economic return, but in ways which do not sacrifice the county's natural aesthetic values" (Wayne, 1994).

2.0 Geographic Characteristics

The five counties in the economic study area are predominantly rural with large land areas and dispersed populations. The number of persons per square mile ranges from 0.9 in Garfield County to 14.3 in Sanpete. Both of these numbers are well below the state and national averages (Table 1-1).

Land ownership in the economic study area is presented in Figures 1-1 and 1-2. The percentage of Federal lands varies by county, but each county is at least half publicly owned. The study area is made up of over 80 percent federally owned land, with another 12.5 percent owned by the state. This leaves 6.76 percent of the total land in private ownership. Lands managed by the BLM Richfield FO total 2.2 million acres, equaling nearly 29 percent of the economic study area.

3.0 Population

Population figures for the five counties are plotted in Figure 1-3. Population growth in the five counties is on an upward trend, although a few are growing at a very slow rate. In all cases, 1999 and 2000 show the largest county populations over the last thirty years. The largest populations within the study area are in Sanpete and Sevier County. Their rate of growth has been sustained by increased business opportunities following the construction of Interstate 70, the construction of an annex of the Utah State Prison, and expansion of other business related to retail trade.

Table 1-2 summarizes the components of population change for the five counties, the study

area, and the State of Utah during the 1980's and 1990's. Columns 4 and 5 show the change in total population during the last two decades. Population in the study area increased by almost eight percent during the 1980s and has grown significantly (24.9 percent) since 1990. Population growth in the study area lagged significantly behind the state's population growth during the 1980s, but outpaced the state's growth during the 1990s.

Changes to the total population are the result of both "natural changes" (i.e. the net result of births and deaths) and from "net migration" (i.e. the net result of persons moving in and out of the area). Columns 8 and 9 show the change in population due to natural changes for each of the counties in the study area. Due to natural changes, the study area's population increased by more than 14 percent in the 1980s and more than nine percent during the 1990s, resulting in a natural growth rate of 1.2 percent annually for the past twenty years.

Net migration for each county is summarized in Columns 10 and 11. While the study area has seen a nearly constant increase in total population, the 1980s were marked by a 6.5 percent decline in population due to net migration. The 1990s, however, showed a marked change in this trend. While natural growth continued, net migration increased in the study area by nearly 16 percent. This trend is similar to the statewide pattern during the 1980s and 1990s, with the study area doubling the statewide trends.

Figure 1-4 shows the population distribution by ethnicity for the economic study area and the State of Utah; the data for this figure was obtained from the 2000 Census. There are only slight differences in ethnic composition between the study area and the state. The study area reported a slightly higher percentage of whites than the statewide figure. Contrary to this, the study area's Hispanic or Latino population was reported at 3.7 percent of the total population, while the state's Hispanic or Latino population was reported at nine percent. The percentages of other ethnic groups are small and similar to Utah as a whole.

4.0 Poverty Rates

The U.S. Census Bureau estimates poverty levels using a set of money income thresholds that vary by family size and composition. If a household's income is below the money threshold, then the family and all the individuals of that household are considered to be in poverty. Using this criterion, the Census Bureau provides estimates of the percentage of individuals that fall below the poverty level for each county in the U.S.

Table 1-7 summarizes the estimated poverty rates for the five counties within the economic study area, the study area as a whole, the state of Utah and the entire U.S. All five counties had a higher poverty rate than state or national rates in 1989, but in 1999, Sevier and Garfield County both had a lower rate of individuals under the poverty level than the United States. Garfield County's 1999 rate was lower than both the Utah and national rate. The percentage of individuals living below the poverty level in all five counties in the study area, the State of Utah, and the nation as a whole decreased from 1989 to 1999.

5.0 Economic Characteristics

Changes in the labor force and unemployment rates can provide information on the health of the local economy. Unemployment rates for the economic study area are shown in Figure 5-1. Throughout the 1990s, unemployment in the study area has been on a downward, though sometimes unsettled trend. Except for 1993, when the national and study area rates were the

same, the unemployment rate for the study area has been higher than both the national and state rates. All trends show a reversal between 2000 and 2001 with marked increases in the unemployment rate. The yearly average unemployment rate for the past twelve years is 7 percent for the study area, 5.5 percent for the nation, and 3.9 percent for the State of Utah.

Changes in the civilian labor force during the 1990's for each county, the study area, and the State of Utah are shown in Table 5-1. The civilian labor force is defined as all persons over 16-years of age in the civilian non-institutional population who either had a job or was looking for a job in the last 12 months (U.S. Department of Labor, Bureau of Labor Statistics). All counties and the state show large increases in the civilian labor force throughout the 1990s. Only Sevier and Garfield Counties have percent changes lower than the state's, and their increases are over 20 percent and nearly 19 percent, respectively. The nine-year average annual increase in the civilian labor force for the study area is 2.53 percent, slightly higher than state's 2.49 average. The increases vary within the study area from a 2.1 percent annual increase in Garfield County to a 3.75 percent increase in Wayne County.

6.0 Personal Income Trends

Personal income data for the five counties was obtained from the U.S. Bureau of Economic Analysis. Figure 6-1 summarizes components of personal income for 1990 through 2000 for the study area in 2002 inflation-adjusted dollars. Total personal income for the study area was well over \$800 million for 2000, an increase of over \$243 million since 1990. This represents a total personal income growth of over 20 percent in ten years.

Personal income can be broken down into three categories: labor income, investment income and transfer payments income. Labor income is derived through wages, salaries and self-employment income. Investment income includes income in the form of rents, dividends and interest earnings. Finally, transfer payments are largely derived from Social Security or other retirement benefits, Medicare and Medicaid benefits and other income support and assistance.

The economic study area has shown minor changes in how income is earned. Labor income during 2000 was 63.6 percent of total personal income, marginally less than the 65.7 percent figure in 1990. Investment income has decreased slightly in ten years as well, from 19 percent in 1990 to 17 percent in 2000. Transfer payment income, however, has absorbed the decreases in both investment and labor income, growing from 17 percent of total personal income in 1990, to 20 percent in 2000. These trends are similar to state and national trends. Utah labor income declined as percentage of total personal income between 1990 and 2000, while Utah investment and transfer payment income grew slightly. Nationally, labor income fell as a percentage of personal income during this same time-period with investment and transfer payment income growing significantly.

Per capita income (2002\$) in the study area has increased at a much slower rate than statewide per capita income, resulting in an increasingly large disparity between study area and state income levels. In 1990, study area per capita income was 79.3 percent of the per capita income throughout the state. That percentage decreased to 70 percent of state per capita income in 2000. In 2000, the study area per capita income was \$16,793, significantly below the national (\$30,150) and state (\$23,977) figures.

7.0 Employment and Earnings by Industry

Employment and earnings data were obtained primarily from the Regional Economic Information System (REIS) of the Bureau of Economic Analysis (BEA), U.S. Department of Commerce. The BEA annually estimates employment and earnings for counties throughout the United States. The employment estimates include those that are employed by businesses and public entities, as well as individuals that are self-employed.

Supplemental data were obtained from following sources:

- Bureau of Labor Statistics, U.S. Department of Labor
- County Business Patterns, Bureau of Census, U.S. Department of Commerce
- Bureau of Census, U.S. Department of Commerce

Often when working with small geographic areas the data obtained from the BEA may contain data gaps or disclosure restrictions. A common data gap in the economic study area's data occurred when there was less than \$50,000 earnings or less than 10 jobs attributable to a given industry. Disclosure restrictions are included in BEA reports to "avoid disclosure of confidential information" (Sonoran, 2002). Another data gap occurred when data was not reported for a given industry for a given year. County data gaps create difficulties in analyzing information for the study area.

Data gaps in county-level employment and income figures were estimated using the Sonoran Institute's Economic Profile System (EPS). The EPS "consists of a series of templates and macros contained in an Excel computer file" (Sonoran, 2002). The EPS loads the data from the above-mentioned sources into template tables that contain various disclosure estimation methods. The following estimation methods were used to fill data gaps in the study area's income and/or employment data:

- Subtract all known rows of data from total to locate the data from the missing row.
- Apply the percent change from the previous year using County Business Patterns data (for employment gaps).
- Project trend from the current growth rate.
- Use least squares technique to forecast a trend line.
- Apply a straight line to the gap.
- Apply a constant share of total to the gap.
- Apply employment percent of change (for earnings gaps).

The potential data resulting from each estimation method was analyzed and the most accurate option was applied to the data gap. Some counties had more data gaps than other counties, resulting in the need for more involved estimation. Regardless of the data set, data gaps are restricted to specific industries. In other words, the employment and earnings figures shown in the totals of the following tables (Figures 7-1 and 7-2) were created with no data gaps.

Employment

Total employment in the economic study area has increased more than 50 percent over the last decade, from 17,202 jobs in 1990 to 25,876 jobs in 2000. This growth rate exceeds the national rate, but lags behind the Utah growth rate.

Figure 1-5 shows the percentage of jobs by industry for the economic study area during 2000. Services, government, and retail trade comprise over 60 percent of employment in the study area. Figure 1-7 shows the trends in employment by industry during the last decade. Industries showing the greatest numerical increase in employment from 1990-2000 include services (2,744 new jobs), trade (1,751 new jobs), government (1,253 new jobs), and construction (815 new jobs). Industries reporting the slowest growth in the study area included farm and agricultural services and mining, both increasing by 12 percent over the last decade.

Rural areas, like the study area, are often more dependent on traditional natural resource based industries such as mining and agriculture. For example, the study area is more dependent on mining and agriculture jobs than the State of Utah. Mining and farm employment made up just over two percent of Utah's total employment in 2000, while those same industries provided for just over 11 percent of jobs in the study area.

Earnings

Earnings by industry were obtained for the five counties in the economic study area for the years 1990 through 2000. Total gross earnings for all industries grew by over 40 percent between 1990 and 2000. Figure 1-7 summarizes gross earnings by industry for the study area during 2000. Earnings from government and service-sector jobs combine to provide nearly 50 percent of all earnings in the study area. Earnings from jobs in the mining and farming sectors provide for just over 10 percent of the study area's total earnings.

Figure 7-1 shows the growth trend in real earnings by industry of the last decade. Earnings from government jobs have consistently been higher than all other industries, bringing over 157 million dollars into the study area in 2000. The service sector has become an integral part of the economy, growing from 59 million dollars and 16 percent of total earnings in 1990 to 104 million dollars and 20 percent of total earnings in 2000. After growing sharply (207 percent) in the 1980s, earnings from jobs in the farm sector have dipped (-36 percent) in the 1990s, and account for 38 million dollars and 7.2 percent of total study area earnings in 2000. Mining also reported a decline in real earnings during the last decade, falling by 6 percent, from \$18 million in 1990 to \$17 million in 2000.

Another method of examining the importance of certain industries is to evaluate the trends in average real earnings per job. Figure 7-2 shows the trends in average real earnings by industry for the study area for 1990 through 2000. Mining, transportation and utilities continue to provide the highest paying jobs in the study area though both industries have experienced a decline in average earnings per job over the last decade. Government and manufacturing sectors have shown growth in average real earnings per job and now provides the third and fourth highest paying jobs in the area. Farm and agricultural services, trade and finance, real estate and insurance reported the lowest earning per job throughout much of the later part of the 1990s.

8.0 Economic Base Analysis

An area's economic base is comprised of industries that are primarily responsible for bringing outside income into the local economy. These industries typically export their goods and services outside the region and in turn, support ancillary industries such as retail trade, housing construction and personal services. The location of important industries in certain areas has traditional being tied to such factors as natural resource base, cost factors (transportation and

labor) and existing transportation infrastructure. However, technology has affected these location factors.

To assess the importance of major industries as a basic industry, location quotients were calculated on nine major industries as listed in Table 8-1. The quotients were derived from data on employment and earnings obtained from the U.S. Bureau of Economic Analysis. A location quotient was calculated for both employment and earnings and compares each industry's share of total local employment or earnings to the industry's state or national share. This quotient yields a value generally between zero and two, where 1.0 indicates an equal share percentage between the local and state or national economies. Location quotients greater than 2.0 indicate a strong industry concentration while those less than 0.50 indicate a weak concentration.

Table 8-1 indicates that the five county study area has a strong concentration in farm and agricultural services and mining and a weak concentration in all other industries. This highlights the importance of these two industries in terms of an economic base to the area. Four industries that are weak in this area compared with the state are manufacturing, construction and financial services, insurance and real estate (F.I.R.E) and services. When compared to the national economy, mining shows an extremely high concentration in both employment and earnings. Transportation and utilities sector also shows a nice concentration compared to the national ratio. Alternatively, manufacturing, F.I.R.E, and trade show weak concentration compared to the national economy.

9.0 Property Valuation and Taxation

Total property valuation for the five counties in the study area for 2000 is summarized in Table 9-1. Data include both state and local assessments. The State of Utah assesses taxes on utility and natural resource properties. Utility and natural resources property includes airlines, transportation, power, telephone, and oil and gas property. During 2000, the valuation of property assessed by the State of Utah was \$303.6 million for the study area. Local government assesses residential, commercial, industrial, agricultural, and personal types of property. Total local assessments during 2000 were \$1.7 billion in the study area. Property taxes charged against each class of property are shown in Table 9-2.

Mineral production is a significant source of tax revenue for the state government. The state assesses several types of natural resource property including: oil and gas extraction, metal mines, coalmines, sand and gravel mines, and non-metal mines (Table 9-3). The total amount of state tax charged against all natural resources in the study area was nearly \$1.4 million during 2000 (Table 9-4). Of this amount, coalmines contributed 72 percent with nearly one million dollars in taxes. Approximately 6 percent of state tax revenue generated in the study area in 2000 was attributable to mineral production and of this amount, most was due to coal (Table 9-2 and Table 9-2).

A source of local government revenue directly attributable to the public lands in each of the counties is Payments In Lieu of Taxes (PILT). PILT payments are made by the Federal government to compensate counties for lost property tax revenue due to public lands. PILT payments are calculated with a complex formula that considers a number of factors including other Federal transfers, such as royalties and charges annually. Table 9-5 shows the PILT payments to each county from 1999 to 2001.

Coal production in the economic study area is attributable entirely to coal resources that exist within Sevier County. Sevier County, however, is the third highest producer of coal in Utah and

contains the highest producing coalmine in the state. Table 10.3 shows coal production from 1984.

The production values for each of the mineral resources describe gross sales for crude resources. The revenue generated from production listed in the above tables does not necessarily circulate through the study area economy, since all of the mining interests producing in the study area are not locally owned and operated. Mining does, however, produce direct and indirect labor earnings (Table 1-7) and tax revenues (Tables 9-2 and 9-4) that circulate through the study area economy. Although production and revenue from coal resources has increased, total employment and income due to mining in the study area has declined steeply over the past two decades.

11.0 Grazing Economics

The farm sector, which includes grazing on public lands, provided 2,508 jobs in the economic study area throughout 2000 (Table 1-5). While this number is marginally higher than numbers from the preceding three years, the farm sector has dropped from providing for nearly 16 percent of total employment in the study area in 1980 to providing nearly 10 percent in 2000. Total earnings in the farm sector were reported as approximately \$38.6 million during 2000, comprising 7.2 percent of total earnings in the study area (Table 1-6). These figures result in an average yearly income of \$15,385 for jobs in the farm sector (Table 7.3). Earnings in the farm sector consist of proprietors' income, cash wages, payment-in-kind, other labor income of hired farm workers, and the salaries of officers of corporate farms.

Tables 1-3 and 11-1 show information from the livestock industry spanning the past fourteen years. Table 1-3 shows production statistics (inventories and receipts from sales for the five counties in the study area) from the USDA National Agricultural Statistics Service (NASS). Total numbers of cattle in the study area has remained mostly constant over the past fourteen years while the number of sheep has declined by over 35 percent. Agricultural product cash receipts have oscillated slightly with no significant changes. The cash receipts figures are not limited to the cash receipts for all beef cows and sheep and lambs in the study area, but include cash receipts from all livestock industries including hogs, dairy products, poultry/eggs, trout, mink, etc. As a result, these numbers reflect the status of the farm sector as a whole.

Livestock use of BLM lands in the study area, shown in Table 11-1, has increased over the past fourteen years, with irregular use recently due to severe drought conditions. The number of livestock operators has increased steadily, spiking to highs in 1999 and 2001. The number of animal unit months (AUMs) licensed (purchased) yearly has increased from lows of nearly 38,000 in 1990 to a high of nearly 76,600 in 2001. An AUM is a standardized measurement of the amount of forage necessary for the sustenance of one cow unit (cow-calf pair) or its equivalent for one month. One AUM is approximately 800 pounds of forage. Low actual use figures in 2000 and 2002 were due to grazing restrictions associated with severe drought conditions. Table 11.1 shows livestock grazing use for the past 14 years, encompassing both dry years and wet years. The discrepancy between active AUMs and licensed AUMs is can be attributed to the variability of range conditions year-to-year, fluctuations of prices in the livestock markets, individual permittees taking voluntary non-use, or combinations of all three. The percentage of licensed AUMs to active AUMs varies from 37 percent in 1990 to 74 percent in 2001. On average, 51 percent of active AUMs have been licensed over the past fourteen years. BLM grazing fees rose to their highest point (\$1.98) in the mid-1990s, but quickly declined and have held steady at or near the base rate of \$1.35 for the past seven years. The value of public

land range resources to the livestock industry can be determined from information in both Table 1-3 and Table 11-1.

The value of grazing AUMs for cattle and sheep were estimated as summarized in Tables 11-2 and 11-3. For cattle AUMS, data was obtained from the Utah Agricultural Statistical Service as shown in columns 2 and 3 and include the cash receipts for cattle sold in Utah each year between 1997-2001. Total cattle sales were divided by cattle inventories at the beginning of each year which provided a value per head as summarized in column 4. The value per cow was then divided by an AUM conversion factor, which resulted in an estimated value per AUM per year. This annual value was adjusted for inflation each year as summarized in column 7. The economic analysis used the five-year average value of AUMS or \$23.68/AUM in inflation adjusted dollars. A similar method was used to value sheep AUMS as presented in Table 11-3. Table 11.4 describes the average value of cattle and sheep production from AUM usage in the BLM Richfield FO from 1997 -2001. The five-year value of production average indicates the average value of an AUM in the state of Utah. Applied to the public lands managed by the Richfield Field Office, this value averages over \$1.3 million per year. Combined with the information from Table 1-3, these data show that, on average, approximately one percent of the value of livestock production in the study area can be attributed to public lands grazing.

12.0 Recreation and Tourism Economics

Recreation visitation to the study area has declined in the past several years, mirroring trends for the state and nation. Despite these visitation declines, recreation and tourism related sectors have the greatest potential for growth among sectors that use public land resources. Understanding the economic impacts of current recreation use in this area is critical to appropriate planning for economic sustainability, resource protection, and quality of life.

Visitation Data

Employment provided by recreation and tourism is typically within the service and retail sectors. It should be noted that not all employment and earnings from these sectors can be directly attributed to tourism and recreation, however, employment and earnings attributable to tourism is closely tied to these sectors. Total service and retail earnings during 2000 were over \$163 million. Over 10,300 workers in these two sectors earned an average of approximately \$15,740 during 2000 in the study area. The Utah Division of Travel Development estimates that there were 2,462 travel and tourism related jobs during 2000. The Division's estimates for travel and tourism jobs, traveler spending, and tourism tax revenues are shown in Table 12-1. Trends for 1998 through 2000 indicate a slight decline in travel to the area and an associated decline in spending, tax revenue, and travel related jobs. The Division of Travel's figures for visits to area state and national parks indicate declines in most areas (Grand Staircase-Escalante N.M. minus 49.9%, Capitol Reef N.P. minus 9.9%, Canyonlands minus 10%, Goblin Valley S.P. minus 14.3%, Scofield S.P. minus 12.1%) but increases in others (Otter Creek S.P. plus 36.8%, Yuba S.P. plus 86.7%). Nationwide, long term recreation and tourism trends contradict this pattern of visitation, but study area recreation may be lagging due to recent economic and social situations such as the national economic downturn and higher gasoline costs. Potential long-term increases in recreation visits will be due to projected state and regional population growth as well as an aging population that will demand increased opportunities for leisure and recreation.

BLM Recreation Visitor Days

Recreation visitation data for the study area is collected by the BLM in its Recreation Management Information System (RMIS). Data is collected by activity, recreation site, and management area. Table 12-2 describes recreation participation and visitor days (12 hours participation in any recreational activity) for the Richfield FO planning area for the fiscal years 1999, 2000, and 2001 (the Federal government's fiscal year extends from October 1 to September 30). The large difference in some of the recreation numbers between fiscal year 2000 and 2001 are attributed to a BLM adjustment in the method of estimation for these activities. During 2001, the greatest number of recreationists participated in driving for pleasure (156,429), off highway vehicle (OHV) use (152,351), camping (128,418) and picnicking (112,439), while the greatest number of visitor days was spent camping (125,787), backpacking (74,079), using OHVs (73,437) and driving for pleasure (73,151).

Information on the amount of recreation visitation can be difficult to obtain in extremely remote areas with virtually unlimited and undetectable entry and exit points. It is reasonable to assume that dispersed recreation visitation numbers are significant undercounts of actual recreation taking place. Other factors influencing recreation visitation numbers include the number of visitors using trailhead registers, agency visitor centers, and fee campgrounds. The visitation figures discussed are produced by BLM using the best information available using the most accurate counting methods possible.

13.0 Environmental Justice

Pursuant to Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations, 59 CFR 7629 (February 11, 1994), the BLM is required to ensure that its programs, policies, and activities do not have the effect of excluding persons (including populations) from participation in, denying persons (including populations) the benefits of, or subject persons (including populations) to discrimination under, such programs, policies, and activities, because of race, color, or national origin. Additionally, the BLM must give due consideration to the economic impacts and benefits of its programs, policies, and activities to low-income populations.

Relevant census data for the counties within the study area were collected to determine whether the populations residing within the five study area counties constitute an environmental justice population, as defined by guidance from the Council on Environmental Quality and BLM Instructional Memorandum 2002-164. This guidance defines an environmental justice population as one that meets either of the following criteria:

- At least one-half of the population is of minority or low-income status, or
- The percentage minority or low-income status populations is meaningfully greater than that of the corresponding population in the general population or other appropriate unit of geographical analysis (CEQ, 1997; BLM, 2002).

For the purposes of this study, a meaningful difference between surrounding population figures and study area population figures is defined as a difference greater than ten percentage points. Given this definition, there are no populations within the study area that meet the criteria to be classified as an environmental justice population.

The planning area shows little or no geographical concentration of minority populations (see

Figure 3.2). Given the relative lack of minority populations in or adjacent to the planning area it is not anticipated that the plan alternatives will have any disproportionately high or adverse economic effects on minority populations.

Analysis of the income structure and distribution reveals minor variations in personal income over the extent of the planning area. Based on data from Census 2000 (see Table 4.1), all five counties in the study area are within seven percentage points of the state's percent of individuals below the poverty level. Due to this, alternatives in the Environmental Impact Statement will not disproportionately impact low-income populations.

14.0 References

- Barton, John D. 1996. Utah History Encyclopedia: Outlaws in Utah. Utah State Historical Society. <http://www.media.utah.edu/UHE/o/OUTLAWS.html>. Accessed 07/18/2003
- Bureau of Economic Analysis (BEA), U.S. Department of Commerce. 2002. Internet. Regional Accounts Data. <http://www.bea.gov/bea/regional/reis>. Accessed 06/2002 - 09/2002.
- Bureau of Labor Statistics (BLS), U.S. Department of Labor. 2002. Internet. Local Area Unemployment Statistics. <http://data.bls.gov/labjava/outside.jsp?survey=la>. Accessed 06/2002 – 09/2002.
- Bureau of Land Management (BLM1). 2002. Internet. Guidance to Address Environmental Justice (EJ) in Land Use Plans and Related National Environmental Policy Act (NEPA) Documents. Instruction Memorandum No. 2002-164. <http://www.blm.gov:80/nhp/efoia/wo/fy02/im2002-164.html>. Accessed 10/07/2002.
- Bureau of Land Management (BLM2). 2002. Internet. News Releases: Federal Grazing Fee Announced. Same site with different years entered for 1998-2002 grazing fees. <http://www.blm.gov:80/nhp/news/index.htm>. Accessed 09/18/2002.
- Bureau of Land Management (BLM3). 2002. Internet. Payments to Utah Counties in Lieu of Taxes. <http://www.ut.blm.gov/Facts&Figures/ff10.html>. Accessed 06/2002 - 09/2002.
- Bureau of Land Management (BLM4), Recreation Management Information System. 2002. Visitor Days and Participants by Office and Activity: Richfield Field Office, Henry Mountains Field Station. Accessed 07/17/2002.
- Bureau of Land Management (BLM5), Richfield Field Office. 2002. Livestock Grazing Use. Personal communication with Vearl Christiansen. 08/12/2002.
- Busk, J. 2001. Utah History Encyclopedia: Richfield. Utah State Historical Society. <http://historytogo.utah.gov/richfield.html>. Accessed 09/03/2002.
- Cabe, L., Coupal, R. 2001. Employment and Income in the Western United States Attributable to BLM Recreation. <http://www.blm.gov:80/nhp/efoia/wo/fy01/im2001-131.html>. Accessed 06/2002 - 09/2002.
- Council on Environmental Quality (CEQ). 1997. Environmental Justice Guidance Under the National Environmental Policy Act. (Available at: <http://ceq.eh.doe.gov/nepa/regs/ej/justice.pdf>).
- Energy Information Administration (EIA). 2003. Internet. Historical Natural Gas Annual: 1930 – 2000. http://www.eia.doe.gov/oil_gas/natural_g.../historical_natural_gas_annual/hnga.html. Accessed 12/16/2002.
- Garfield County, Utah General Plan, adopted 13 March 1995, amended 26 January 1998.
- Haymond, Jay M. 1996a. Utah History Encyclopedia: Capitol Reef National Park. Utah State

- Historical Society. <http://www.media.utah.edu/UHE/c/CAPITOLREEF.html>. Accessed 07/18/2003.
- Haymond, Jay M. 1996b. Utah History Encyclopedia: Richfield. Utah State Historical Society. <http://www.media.utah.edu/UHE/g/Garfield.html>. Accessed 07/18/2003.
- Haymond, Jay M. 1996c. Utah History Encyclopedia: Sevier River. Utah State Historical Society. <http://www.media.utah.edu/UHE/s/SEVIERRIVER.html>. Accessed 07/18/2003.
- Jahanbani, F.R. 2001. 2000 Annual Review and Forecast of Utah Coal Production and Distribution. State of Utah Department of Natural Resources. July 2001.
- Murphy, Miriam B. 1996a. Utah History Encyclopedia: Garfield County. Utah State Historical Society. <http://www.media.utah.edu/UHE/g/GARFIELDCT.html>. Accessed 07/18/2003.
- Murphy, Miriam B. 1996b. Utah History Encyclopedia: Sevier County. Utah State Historical Society. <http://www.media.utah.edu/UHE/s/SEVIERCT.html>. Accessed 07/18/2003.
- Murphy, Miriam B. 1996c. Utah History Encyclopedia: Wayne County. Utah State Historical Society. <http://www.media.utah.edu/UHE/w/WAYNECT.html>. Accessed 07/18/2003.
- Peterson, Gary B. 1996a. Utah History Encyclopedia: Piute County. Utah State Historical Society. <http://www.media.utah.edu/UHE/p/PIUTECT.html>. Accessed 07/18/2003.
- Peterson, Gary B. 1996b. Utah History Encyclopedia: Sanpete County. Utah State Historical Society. <http://www.media.utah.edu/UHE/s/SANPETECT.html>. Accessed 07/18/2003.
- Piute County. 2002. Internet. History. <http://www.piute-county.com/History/History.htm>. Accessed 09/03/2002.
- Piute County General Plan. 1994. Adopted Sept. 12.
- Roberts, Allen. 1996. Utah History Encyclopedia: Spring City. Utah State Historical Society. <http://www.media.utah.edu/UHE/s/SPRINGCITY.html>. Accessed 07/18/2003.
- Salt Lake Tribune, Sept. 18, 2002. "Religious Numbers Not All Inclusive".
- Sanpete County General Plan, June 1997.
- Sevier County General Plan, adopted Feb. 2, 1998.
- Sonoran Institute. 2002. Internet. Economic Profile System & Economic Profile System: User's Manual. <http://209.145.203.111/eps>. Accessed 07/25/2002.
- Sowards, Glade. 2003. Personal Communication and E-Mails – December 2002 and January 2003.
- U.S. Census Bureau (1). 2000. Internet. American FactFinder Quick Tables: DP-3 Profile of Selected Economic Characteristics: 2000. <http://factfinder.census.gov/servlet/BasicFactsServlet>. Accessed 09/17/2002.

- U.S. Census Bureau(2). 2000. Internet. Census 2000: State and County QuickFacts.
<http://quickfacts.census.gov/qfd/states/49000.html>. Accessed 06/2002 - 09/2002.
- U.S. Census Bureau(3). 2000. Internet. Population Estimates.
<http://eire.census.gov/popest/estimates.php>. Accessed 06/2002 - 09/2002.
- U.S. Census Bureau(4). 1990. Internet. STF 3 – P117 – Poverty Status in 1989 by Age.
http://factfinder.census.gov/servlet/DTTable?_ts=52311707565. Accessed 10/09/2002.
- U.S. Department of Agriculture, National Agricultural Statistics Service, Utah Agricultural Statistics Service. 2002. Internet. Annual Bulletin for years 1999 –2001.
http://www.nass.usda.gov/ut/ut_ab.htm. Accessed 06/2002 - 09/2002.
- U.S. Department of Agriculture. 1997. National Agricultural Statistics Service, 1997 Census of Agriculture <http://governor.utah.gov/dea/Ranking/Counties/acresgh.htm> and <http://governor.utah.gov/dea/Ranking/Counties/farmsgh.htm>. Accessed 07/18/03.
- Utah Association of Counties (UAC). 2002. Internet. Cities in Counties.
<http://www.uacnet.org/counties/cities.html>. Accessed 09/03/2002.
- Utah Division of Oil, Gas, and Mining (1). 2002. Internet. Oil and Gas Production by County.
ftp://dogm.nr.state.ut.us/PUB/Oil&Gas/Publications/Reports/Production/by_county/PrdOct00.PDF. Accessed 06/2002 - 09/2002.
- Utah Division of Oil, Gas, and Mining (2). 2002. Internet. Annual Drilling Results – By County.
http://ogm.utah.gov/oilgas/STATISTICS/completions/compcount/wcr_annual_county.htm. Accessed 06/2002 - 09/2002.
- Utah Division of Travel Development. 2002. Internet. 2001 State and County Economic & Travel Indicator Profiles. <http://dced.utah.gov/travel/countypfiles.html>. Accessed 06/2002 - 09/2002.
- Utah Office of Energy and Resource Planning. 1999. Utah Energy Statistical Abstract. State of Utah, Department of Natural Resources. Salt Lake City, UT.
- Utah State Historical Society. 2002. Internet. Utah's Counties. <http://history.utah.gov>. Accessed 09/03/2002.
- Utah, State of; Governor's Office of Planning and Budget. 2002. Internet. State of Utah Long Term Economic and Demographic Projections.
<http://governor.state.ut.us/projections/T22.pdf>. Accessed 06/2002 - 09/2002.
- Utah State Tax Commission, Property Tax Division. 2002. Internet. 2000 Annual Statistical Report. <http://www.tax.ex.state.ut.us/property/rates/graphics/2000annual.pdf>. Accessed 06/2002 - 09/2002.
- Wayne County General Plan, adopted May 2, 1994
- Webb, Roy. 1996. Utah History Encyclopedia: Henry Mountains. Utah State Historical Society.
<http://www.media.utah.edu/UHE/h/HENRYMOUNTAINS.html>. Accessed 07/18/2003.

Williams, Kenneth R. 1996a. Utah History Encyclopedia: Hanksville. Utah State Historical Society. <http://www.media.utah.edu/UHE/h/HANKSVILLE.html>. Accessed 07/18/2003.

Williams, Kenneth R. 1996b. Utah History Encyclopedia: Loa. Utah State Historical Society. <http://www.media.utah.edu/UHE//LOA.html>. Accessed 07/18/2003.

Table 1-1. Geographic Characteristics of Economic Study Area

| | Total Population (2000 Census) | Land Area (Million Acres) | Land Area (Sq. Miles) | Persons Per Sq. Mile |
|---------------|---|--------------------------------------|----------------------------------|-----------------------------|
| Garfield Co. | 4,735 | 3.31 | 5,174 | 0.9 |
| Piute Co. | 1,435 | 0.49 | 758 | 1.9 |
| Sanpete Co. | 22,763 | 1.02 | 1,588 | 14.3 |
| Sevier Co. | 18,842 | 1.22 | 1,910 | 9.9 |
| Wayne Co. | 2,509 | 1.57 | 2,460 | 1.0 |
| Study Area | 50,284 | 7.61 | 11,890 | 4.2 |
| Utah | 2,233,169 | 52.57 | 82,144 | 27.2 |
| United States | 281,421,906 | 2,263.95 | 3,537,441 | 79.6 |

Source: Utah Division of Travel Development, Department of Community and Economic Development, 2001 State and County Economic and Travel Indicator Profiles; U.S. Census Bureau

Table 1-2. Components of Population Change, 1980-1999

| 1990-1999 | | | | | | | | | | |
|------------------|------------------------|------------------------|-------------------------------------|--|--------------------------|--------------------------|---|--|----------------------|---|
| County | 1990 Population | 1999 Population | Numeric Change in Population | Percentage Change in Population | Cumulative Births | Cumulative Deaths | Numeric Natural Change in Population | Percentage Natural Change in Population | Net Migration | Percentage Change in Population Due to Net Migration |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) |
| Garfield | 3,980 | 4,286 | 306 | 7.7% | 624 | 306 | 318 | 8.0% | -12 | -0.3% |
| Piute | 1,277 | 1,484 | 207 | 16.2% | 176 | 143 | 33 | 2.6% | 174 | 13.6% |
| Sanpete | 16,259 | 22,059 | 5,800 | 35.7% | 3,049 | 1,365 | 1,684 | 10.4% | 4,116 | 25.3% |
| Sevier | 15,431 | 18,645 | 3,214 | 20.8% | 2,664 | 1,286 | 1,378 | 8.9% | 1,836 | 11.9% |
| Wayne | 2,177 | 2,387 | 210 | 9.6% | 333 | 182 | 151 | 6.9% | 59 | 2.7% |
| Study Area | 39,124 | 48,861 | 9,737 | 24.9% | 6,846 | 3,282 | 3,564 | 9.1% | 6,173 | 15.8% |
| Utah | 1,722,850 | 2,129,836 | 406,986 | 23.6% | 369,419 | 98,393 | 271,026 | 15.7% | 135,960 | 7.9% |
| 1980-1989 | | | | | | | | | | |
| County | 1980 Population | 1989 Population | Numeric Change in Population | Percentage Change in Population | Cumulative Births | Cumulative Deaths | Numeric Natural Change in Population | Percentage Natural Change in Population | Net Migration | Percentage Change in Population Due to Net Migration |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) |
| Garfield | 3,673 | 4,033 | 360 | 9.8% | 894 | 321 | 573 | 15.6% | -213 | -5.8% |
| Piute | 1,329 | 1,296 | -33 | -2.5% | 216 | 161 | 55 | 4.1% | -88 | -6.6% |
| Sanpete | 14,620 | 16,162 | 1,542 | 10.5% | 3,464 | 1,329 | 2,135 | 14.6% | -593 | -4.1% |
| Sevier | 14,727 | 15,417 | 690 | 4.7% | 3,355 | 1,252 | 2,103 | 14.3% | -1,413 | -9.6% |
| Wayne | 1,911 | 2,133 | 222 | 11.6% | 440 | 159 | 281 | 14.7% | -59 | -3.1% |
| Study Area | 36,260 | 39,041 | 2,781 | 7.7% | 8,369 | 3,222 | 5,147 | 14.2% | -2,366 | -6.5% |
| Utah | 1,461,037 | 1,705,865 | 244,828 | 16.8% | 381,549 | 88,034 | 293,515 | 20.1% | -48,687 | -3.3% |

Source: U.S. Census Bureau, Population Estimates Archives

Table 1-3. Agricultural Production, 1998-2000

| Beef Cows | | | | | | | | | | | | | | |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
| Garfield | 10,900 | 11,000 | 11,000 | 11,000 | 12,200 | 12,000 | 10,000 | 11,000 | 12,100 | 13,000 | 11,500 | 11,000 | 11,500 | 11,500 |
| Piute | 4,800 | 5,900 | 6,000 | 5,000 | 4,700 | 5,900 | 4,500 | 5,000 | 4,900 | 2,500 | 5,000 | 5,000 | 4,500 | 4,500 |
| Sanpete | 15,300 | 15,000 | 16,000 | 15,000 | 15,500 | 15,500 | 14,000 | 13,000 | 13,400 | 13,500 | 18,000 | 17,000 | 18,500 | 19,000 |
| Sevier | 12,200 | 12,000 | 13,000 | 13,000 | 12,600 | 13,400 | 13,000 | 14,000 | 13,400 | 14,500 | 11,500 | 11,000 | 11,000 | 11,000 |
| Wayne | 9,500 | 9,700 | 11,000 | 11,000 | 10,200 | 10,800 | 9,800 | 10,000 | 10,600 | 11,500 | 9,000 | 8,500 | 8,500 | 8,500 |
| Study Area | 52,700 | 53,600 | 57,000 | 55,000 | 55,200 | 57,600 | 51,300 | 53,000 | 54,400 | 55,000 | 55,000 | 52,500 | 54,000 | 54,500 |
| Breeding Sheep and Lambs | | | | | | | | | | | | | | |
| | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
| Garfield | 3,000 | 3,200 | 4,000 | 3,000 | 3,600 | 2,900 | 2,100 | 2,000 | 1,900 | 2,000 | 2,000 | 2,200 | 2,000 | 1,800 |
| Piute | 4,500 | 4,700 | 5,500 | 5,000 | 4,800 | 5,300 | 4,800 | 4,500 | 4,100 | 3,000 | 3,000 | 3,000 | 4,000 | 4,000 |
| Sanpete | 88,000 | 90,000 | 85,000 | 89,000 | 85,000 | 82,600 | 74,600 | 59,000 | 61,200 | 59,000 | 62,000 | 59,000 | 65,500 | 63,200 |
| Sevier | 20,000 | 19,500 | 15,000 | 14,000 | 10,700 | 10,400 | 11,000 | 13,000 | 12,300 | 11,000 | 10,000 | 4,000 | 5,000 | 4,800 |
| Wayne | 11,000 | 12,200 | 12,500 | 12,000 | 11,000 | 9,500 | 8,300 | 8,000 | 7,800 | 7,000 | 6,000 | 7,000 | 7,000 | 6,400 |
| Study Area | 126,500 | 129,600 | 122,000 | 123,000 | 115,100 | 110,700 | 100,800 | 86,500 | 87,300 | 82,000 | 83,000 | 75,200 | 83,500 | 80,200 |
| Cash Receipts – Livestock and Livestock Products (\$1,000)³ | | | | | | | | | | | | | | |
| | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
| Garfield | \$9,176 | \$10,956 | \$9,533 | \$9,053 | \$8,345 | \$9,315 | \$7,408 | \$7,474 | \$7,656 | \$9,440 | \$8,780 | \$8,249 | \$8,696 | \$8,600 |
| Piute | \$8,080 | \$9,313 | \$8,643 | \$6,851 | \$7,630 | \$8,267 | \$8,776 | \$9,148 | \$8,968 | \$8,368 | \$9,838 | \$9,189 | \$8,696 | \$9,300 |
| Sanpete | \$101,892 | \$100,797 | \$95,834 | \$87,472 | \$84,287 | \$91,287 | \$79,896 | \$81,994 | \$81,371 | \$81,853 | \$81,771 | \$87,400 | \$87,578 | \$89,300 |
| Sevier | \$29,171 | \$32,458 | \$30,250 | \$31,441 | \$30,281 | \$33,418 | \$34,762 | \$33,355 | \$33,905 | \$36,475 | \$28,244 | \$28,924 | \$32,023 | \$34,900 |
| Wayne | \$10,819 | \$12,463 | \$10,676 | \$10,888 | \$10,372 | \$10,596 | \$9,118 | \$10,821 | \$11,703 | \$13,410 | \$13,223 | \$13,261 | \$12,993 | \$13,600 |
| Study Area | \$159,138 | \$165,986 | \$154,936 | \$145,704 | \$140,915 | \$152,883 | \$139,961 | \$142,792 | \$143,603 | \$149,546 | \$141,856 | \$147,024 | \$149,987 | \$155,700 |

Notes:

¹Agricultural production is listed only for uses found on public lands, however, Cash Receipts include all agricultural products (cattle, hogs, sheep, dairy products, poultry/eggs, honey, wool, trout, mink, etc.)

²Herd inventories as of Jan 1, following year (It should be noted that herd counts are usually low at this time of year, however, these are the figures the Utah Agriculture Service uses, so they are used in this report as well.)

³All dollar figures are 2001 Real Dollars.

Source: U.S. Department of Agricultural, National Agricultural Statistics Service, Utah Agricultural Service

Table 1-4. Oil Production, 1992 – 2001

| Counties¹ | | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|-----------------------------|---------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Garfield | Barrels | 310,858 | 282,058 | 273,266 | 260,031 | 250,315 | 239,969 | 222,038 | 220,179 | 214,266 | 206,270 |
| | 2001\$ | \$7,185,870 | \$5,740,817 | \$5,101,613 | \$5,137,343 | \$5,776,537 | \$4,780,552 | \$2,940,704 | \$4,067,142 | \$6,254,254 | \$4,969,044 |
| Sanpete | Barrels | - | - | - | - | 230 | 83 | - | 72 | - | 20 |
| | 2001\$ | - | - | - | - | \$5,308 | \$1,653 | - | \$1,330 | - | \$482 |
| Study Area | Barrels | 310,858 | 282,058 | 273,266 | 260,031 | 250,545 | 240,052 | 222,038 | 220,251 | 214,266 | 206,290 |
| | 2001\$ | \$7,185,870 | \$5,740,817 | \$5,101,613 | \$5,137,343 | \$5,781,845 | \$4,782,205 | \$2,940,704 | \$4,068,472 | \$6,254,254 | \$4,969,526 |

Notes: ¹No oil production was reported in Piute, Sevier, or Wayne Counties from 1984 to 2001.

Sources: Utah Division of Oil, Gas and Mining – Utah Oil and Gas Production by County; Utah Energy Statistical Abstract (1999); Glade Sowards, Natural Resource Analyst for the Utah Office of Energy and Resource Planning (Jan. 2003).

Table 1-5. Natural Gas Production, 1997 - 2001¹

| Counties² | 1997 | 1998 | 1999 | 2000 | 2001⁴ |
|-------------------------------|-------------|-------------|-------------|-------------|-------------------------|
| Garfield Co. mcf ³ | - | 2,300 | 9,123 | 6,875 | 9,125 |
| 2001\$ | - | \$4,209 | \$18,386 | \$23,071 | \$33,398 |
| Sanpete Co. Mcf ³ | 425 | - | - | - | 100 |
| 2001\$ | \$848 | - | - | - | \$366 |
| Study Area Mcf ³ | 425 | 2,300 | 9,123 | 6,875 | 9,225 |
| 2001\$ | \$848 | \$4,209 | \$18,386 | \$23,071 | \$33,764 |

Notes:

¹No natural gas production reported in the economic study area from 1984 to 1996.

²No natural gas production has been reported in Piute, Sevier, or Wayne Counties between 1984 and 2001.

³mcf = thousand cubic feet.

⁴2001 value of production data is figured using estimated well-head prices obtained from UDOGM.

Sources: Utah Division of Oil, Gas and Mining – Utah Oil and Gas Production by County; Utah Energy Statistical Abstract (1999); Glade Sowards, Natural Resource Analyst for the Utah Office of Energy and Resource Planning (Jan. 2003); Energy Information Administration – Historical Natural Gas Annual 1930 – 2000.

Table 1-6. Coal Production, 1984 – 2001

| Counties¹ | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 |
|-----------------------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|
| Sevier Unit ² | 2,141,000 | 1,797,000 | 2,360,000 | 2,228,000 | 2,625,000 | 3,059,000 | 2,887,000 | 3,079,000 | 2,580,000 |
| 2001\$ | \$96,113,384 | \$74,079,461 | \$94,657,512 | \$80,983,867 | \$82,325,371 | \$88,794,500 | \$79,919,360 | \$81,211,800 | \$67,144,882 |
| | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
| Sevier Unit ² | 3,553,000 | 3,569,000 | 3,906,000 | 4,214,000 | 4,939,000 | 5,719,000 | 5,763,000 | 5,906,000 | 6,111,000 |
| 2001\$ | \$87,581,011 | \$81,639,793 | \$83,269,860 | \$85,263,758 | \$97,173,834 | \$107,867,625 | \$104,468,169 | \$102,298,887 | \$108,531,360 |

Notes:

¹No coal production has been reported in Garfield, Piute, Sanpete, or Wayne County between 1980 and 2001.²Units are shown in short tons.

Table 1-7. Individuals Below Poverty Level, 1989 and 1999

| | 1989 | 1999 |
|--------------|-------------|-------------|
| Garfield Co. | 14.5% | 8.1% |
| Piute Co. | 20.7% | 16.2% |
| Sanpete Co. | 19.7% | 15.9% |
| Sevier Co. | 14.7% | 10.8% |
| Wayne Co. | 16.5% | 15.4% |
| Study Area | 17.0% | 13.0% |
| Utah | 11.3% | 9.4% |
| U.S. | 12.9% | 12.4% |

Sources: U.S. Census Bureau, American FactFinder Quick Tables: DP-3 Profile of Selected Economic Characteristics: 2000; U.S. Census Bureau, 1990 STF 3 – P117 – Poverty Status in 1989 by Age.

Table 5-1. Change in Civilian Labor Force, 1992-2001

| | Change in Civilian Labor Force Between 1992-2001 | Percentage Change in Civilian Labor Force Between 1992-2001 |
|---------------------|---|--|
| Garfield Co. | 515 | 18.86% |
| Piute Co. | 159 | 25.94% |
| Sanpete Co. | 2,131 | 24.19% |
| Sevier Co. | 1,650 | 20.22% |
| Wayne Co. | 524 | 33.74% |
| Economic Study Area | 4,979 | 22.77% |
| Utah | 249,803 | 22.39% |

Source: U.S. Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics

Table 8-1. Location Quotients, 2000

| Industry | Employment | | Earnings | |
|----------------------|------------------------|--------------------------|------------------------|--------------------------|
| | Location Quotient (UT) | Location Quotient (U.S.) | Location Quotient (UT) | Location Quotient (U.S.) |
| Farm and Ag Services | 5.52 | 3.47 | 6.72 | 1.35 |
| Mining | 2.25 | 3.17 | 18.74 | 133.37 |
| Construction | 0.85 | 1.03 | 1.26 | 2.12 |
| Manufacturing | 0.83 | 0.71 | 0.89 | 0.33 |
| Trans. and Utilities | 1.21 | 1.19 | 2.39 | 20.32 |
| Trade | 0.92 | 0.92 | 0.39 | 0.19 |
| FIRE | 0.54 | 0.65 | 0.58 | 0.55 |
| Services | 0.77 | 0.74 | 0.29 | 2.76 |
| Government | 1.35 | 1.46 | 0.81 | 1.35 |

Table 9-1. Assessed Property Valuations by County, 2000 (2001 Real Dollars)

| | Valuation of State Assessed Property | | | Valuation of Locally Assessed Property | | | | | |
|------------------|--------------------------------------|-------------------|-------------------------------|--|------------------------------------|-----------------------|-------------------|---------------------------------|---|
| | Utilities | Natural Resources | Total State Assessed Property | Residential Property | Commercial and Industrial Property | Agricultural Property | Personal Property | Total Locally Assessed Property | Total State and Locally Assessed Property |
| Garfield | \$30,527,867 | \$10,833,903 | \$41,361,770 | \$127,717,970 | \$55,689,360 | \$41,685,802 | \$13,653,500 | \$238,746,632 | \$280,108,401 |
| Piute | \$10,382,855 | \$387,751 | \$10,770,606 | \$22,707,565 | \$2,629,233 | \$9,204,924 | \$955,631 | \$35,497,353 | \$46,267,959 |
| Sanpete | \$48,211,496 | \$6,210,758 | \$54,422,254 | \$373,063,884 | \$52,444,086 | \$134,592,649 | \$25,053,804 | \$585,154,423 | \$639,576,667 |
| Sevier | \$70,958,185 | \$115,962,536 | \$186,920,721 | \$306,624,652 | \$73,557,965 | \$54,323,240 | \$30,891,939 | \$465,397,796 | \$652,318,517 |
| Wayne | \$9,143,351 | \$993,944 | \$10,137,296 | \$52,050,728 | \$22,250,109 | \$35,827,699 | \$4,302,143 | \$114,430,679 | \$124,567,974 |
| Total-Study Area | \$169,223,755 | \$134,388,892 | \$303,612,646 | \$882,164,798 | \$206,570,754 | \$275,634,313 | \$74,857,018 | \$1,439,226,883 | \$1,742,839,519 |

Source: 2000 Annual Statistical Report, Property Tax Division, Utah Tax Commission – Local Personal, and Centrally Assessed Property

Table 9-2. Property Taxes Charged Against Each Class of Property, 2000 (2001 Real Dollars)

| | Total Real Property | Total Personal Property | Total Locally Assessed | Total Utilities | Total Natural Resources | Total State Assessed | Total Local and State Assessed | Fee-In Lieu Motor Vehicle | Total Property Tax Charged |
|-------------------------|----------------------------|--------------------------------|-------------------------------|------------------------|--------------------------------|-----------------------------|---------------------------------------|----------------------------------|-----------------------------------|
| Garfield | \$2,341,565 | \$142,649 | \$2,484,213 | \$317,299 | \$98,600 | \$415,899 | \$2,900,112 | \$364,178 | \$3,264,289 |
| Piute | \$360,330 | \$10,024 | \$370,354 | \$102,953 | \$3,687 | \$106,641 | \$476,995 | \$131,766 | \$608,761 |
| Sanpete | \$5,767,942 | \$269,291 | \$6,037,232 | \$472,973 | \$64,871 | \$537,845 | \$6,575,077 | \$1,372,989 | \$7,948,066 |
| Sevier | \$5,222,153 | \$372,646 | \$5,594,798 | \$783,317 | \$1,213,079 | \$1,996,396 | \$7,591,195 | \$1,525,708 | \$9,116,903 |
| Wayne | \$718,554 | \$28,271 | \$746,825 | \$59,861 | \$6,395 | \$66,256 | \$813,082 | \$199,594 | \$1,012,675 |
| Total-Study Area | \$14,410,542 | \$822,881 | \$15,233,423 | \$1736403 | \$1,386,633 | \$3,123,037 | \$18,356,460 | \$3,594,235 | \$21,950,695 |

Source: 2000 Annual Statistical Report, Property Tax Division, Utah Tax Commission – Local Personal, and Centrally Assessed Property

**Table 9-3. Assessed Value of Natural Resource Property, 2000
(2001 Real Dollars)**

| <i>All dollar figures are in 2001 Real Dollars</i> | Oil and Gas Extraction | Metal Mines | Coal Mines | Sand and Gravel | Non-Metal Mines | Total Natural Resource |
|--|-----------------------------------|--------------------|-------------------|----------------------------|----------------------------|-----------------------------------|
| Garfield | \$4,275,109 | \$5,560,468 | \$0 | \$998,326 | \$0 | \$10,833,903 |
| Piute | \$0 | \$232,501 | \$0 | \$0 | \$155,250 | \$387,751 |
| Sanpete | \$128,195 | \$35,942 | \$0 | \$3,442,751 | \$2,603,871 | \$6,210,758 |
| Sevier | \$0 | \$41,804 | \$96,117,271 | \$2,542,489 | \$17,260,972 | \$115,962,536 |
| Wayne | \$0 | \$0 | \$0 | \$464,377 | \$529,567 | \$993,944 |
| Total-Study Area | \$4,403,304 | \$5,870,715 | \$96,117,271 | \$7,447,944 | \$20,549,659 | \$134,388,892 |

Source: 2000 Annual Statistical Report, Property Tax Division, Utah State Tax Commission – Local Personal, and Centrally Assessed Property

**Table 9-4. Property Taxes Charged Against Natural Resource Property, 2000
(2001 Real Dollars)**

| <i>All dollar figures are in 2001 Real Dollars</i> | Oil and Gas Extraction | Metal Mines | Coal Mines | Sand and Gravel | Non-Metal Mines | Total Natural Resource |
|--|-----------------------------------|--------------------|-------------------|----------------------------|----------------------------|-----------------------------------|
| Garfield | \$38,856 | \$50,028 | \$0 | \$9,716 | \$0 | \$98,600 |
| Piute | \$0 | \$2,211 | \$0 | \$0 | \$1,476 | \$3,687 |
| Sanpete | \$4,100 | \$363 | \$0 | \$33,345 | \$27,064 | \$64,872 |
| Sevier | \$0 | \$434 | \$999,260 | \$26,386 | \$186,999 | \$1,213,079 |
| Wayne | \$0 | \$0 | \$0 | \$2,987 | \$3,407 | \$6,394 |
| Total-Study Area | \$42,955 | \$53,036 | \$999,260 | \$72,435 | \$218,947 | \$1,386,633 |

Source: 2000 Annual Statistical Report, Property Tax Division, Utah State Tax Commission – Local Personal, and Centrally Assessed Property

Table 9-5. Payments in Lieu of Taxes, 1999-2001 (2001 Real Dollars)

| | 1999 | 2000 | 2001 |
|------------|-------------|-------------|-------------|
| Garfield | \$218,972 | \$230,069 | \$357,580 |
| Piute | \$66,962 | \$68,404 | \$98,063 |
| Sanpete | \$407,730 | \$416,578 | \$587,296 |
| Sevier | \$516,541 | \$528,476 | \$770,753 |
| Wayne | \$123,311 | \$128,121 | \$189,476 |
| Study Area | \$1,333,515 | \$1,371,648 | \$2,003,168 |

Source: Utah BLM; Annual Facts and Figures

Table 11-1. Livestock Grazing Use - Richfield Field Office¹

| | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|--|-----------|-----------|----------|-----------|-----------|-----------|-----------|-----------|----------|----------|----------|-----------|----------|-----------|-----------------------|
| Grazing Permits² | 177 | 177 | 177 | 177 | 177 | 177 | 177 | 177 | 177 | 177 | 177 | 177 | 177 | 177 | 177 |
| Total Livestock Operators | 126 | 125 | 120 | 123 | 129 | 131 | 128 | 130 | 129 | 135 | 139 | 148 | 144 | 147 | 143 |
| Cattle & Horse | 101 | 103 | 97 | 98 | 104 | 106 | 108 | 109 | 111 | 116 | 118 | 113 | 127 | 132 | 130 |
| Sheep & Goats | 42 | 41 | 36 | 42 | 42 | 42 | 32 | 37 | 35 | 36 | 38 | 37 | 33 | 35 | 32 |
| Active AUMs | 104,184 | 104,184 | 104,184 | 104,184 | 104,184 | 104,184 | 104,184 | 104,184 | 104,184 | 104,184 | 104,184 | 104,184 | 104,184 | 104,184 | 104,184 |
| Total Licensed AUMs | 49,893 | 43,619 | 37,995 | 42,260 | 47,261 | 52,161 | 52,251 | 59,046 | 57,784 | 58,945 | 69,594 | 72,357 | 59,406 | 76,591 | 59,934 |
| Cattle & Horses | 40,467 | 35,337 | 30,202 | 35,837 | 39,783 | 42,768 | 43,338 | 47,532 | 48,996 | 48,894 | 59,930 | 62,295 | 50,246 | 63,743 | 52,287 |
| Sheep & Goats | 9,426 | 8,282 | 7,793 | 6,423 | 7,478 | 9,393 | 8,913 | 11,514 | 8,788 | 10,051 | 9,664 | 10,062 | 9,160 | 12,848 | 7,647 |
| Grazing Fees (\$/AUM) | \$1.54 | \$1.86 | \$1.81 | \$1.97 | \$1.92 | \$1.86 | \$1.98 | \$1.61 | \$1.35 | \$1.35 | \$1.35 | \$1.35 | \$1.35 | \$1.35 | \$1.43 |
| Total Grazing Fee Collections⁴ | \$105,227 | \$106,998 | \$87,408 | \$101,849 | \$108,179 | \$112,967 | \$117,915 | \$106,050 | \$85,318 | \$85,367 | \$99,386 | \$102,000 | \$82,051 | \$103,398 | \$85,706 ⁴ |

Notes:

¹Figures are by Billing Year (March 1 – February 28).²Difference between total permits and operators denotes some operators with two permits.³The 2002 grazing year will end on February 28, 2003, therefore there is not yet Actual Use data for this year.⁴Fee Collections for all years but 2002 are listed in 2001 Real Dollars. Grazing fee collections for 2002 are shown in 2002 nominal dollars.

Sources: BLM Richfield Field Office; BLM National Web Page

Table 11-2. Estimated Value of Cattle AUMs in Utah (2001\$)

| Year | Annual Cash Receipts for Cattle (1,000\$) | Inventory Beginning of Year (1,000 Head) | Value Per Head | Conversion to AUMs (AUMs/cow) ^b | Value of Production Per AUM (Nominal \$) | Value of Production Per AUM (2001\$) |
|------|---|--|----------------|--|--|--------------------------------------|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| 1997 | \$319,899 | 930 | \$343.98 | 16 | \$21.50 | \$23.06 |
| 1998 | \$303,111 | 910 | \$333.09 | 16 | \$20.82 | \$22.02 |
| 1999 | \$314,162 | 890 | \$352.99 | 16 | \$22.06 | \$23.04 |
| 2000 | \$349,323 | 910 | \$383.87 | 16 | \$23.99 | \$24.55 |
| 2001 | \$374,459 | 910 | \$411.49 | 16 | \$25.72 | \$25.72 |
| | | | | 5-year Ave. (1997-2001) | \$22.82 | \$23.68 |

^b J.P. Workman, *Range Economics*, 1986, McMillian Publishing, Inc. New York, New York.

Table 11-3. Estimated Value of Sheep AUMs in Utah (2001\$)

| Year | Cash Receipts (Sheep and Lambs) (1,000\$) | Value of Wool Production (1,000\$) | Total Cash Receipts and Wool Production (1,000\$) | Inventory Beginning of Year (1,000 Head) | Value Per Ewe | Conversion to AUMs (AUMs/Ewe) | Value of Production Per AUM (Nominal\$) | Value of Production Per AUM (2001\$) |
|------|---|------------------------------------|---|--|---------------|--------------------------------|---|--------------------------------------|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| 1997 | \$26,232 | 2410 | \$26,232.00 | 440 | \$59.62 | \$3.20 | \$18.63 | \$19.99 |
| 1998 | \$19,395 | 1957 | \$21,352.00 | 420 | \$50.84 | \$3.20 | \$15.89 | \$16.81 |
| 1999 | \$18,424 | 963 | \$19,387.00 | 400 | \$48.47 | \$3.20 | \$15.15 | \$15.82 |
| 2000 | \$21,058 | 673 | \$21,731.00 | 400 | \$54.33 | \$3.20 | \$16.98 | \$17.37 |
| 2001 | \$15,194 | 812 | \$16,006.00 | 390 | \$41.04 | \$3.20 | \$12.83 | \$12.83 |
| | | | | | | 5-year Ave. (1997-2001) | \$15.89 | \$16.56 |

^b J.P. Workman, *Range Economics*, 1986, McMillian Publishing, Inc. New York, New York.

Table 11-4. Value of Grazing Output on Richfield Field Office Public Lands

| Annual Average AUMs (5yr Average) 1997-2001 | |
|--|-------------|
| Cattle | 56,223 |
| Sheep | 9,905 |
| Total | 55,654 |
| Estimated Value of Production | |
| Cattle (2001\$/AUM) (1988-2001: 5 year average) | \$23.68 |
| Sheep (2001\$/AUM) (1988-2001: 5 year average) | \$16.56 |
| Value of Grazing Output from Richfield BLM Lands (2001\$) | |
| Cattle | \$1,331,360 |
| Sheep | \$164,026 |
| Total | \$1,495,386 |

Sources: BLM Richfield Field Office; U.S. Department of Agriculture, National Agricultural Statistics Service, Utah Agriculture Statistics Service

Table 12-1. Travel and Tourism Indicators, 1998-2000 (2001 Real Dollars)

| Spending by Travelers¹ | 1998 | 1999 | 2000 |
|--|---------------|---------------|---------------|
| Garfield | \$55,642,345 | \$62,025,759 | \$56,066,193 |
| Piute | \$1,269,407 | \$1,775,148 | \$1,841,590 |
| Sanpete | \$25,599,710 | \$24,538,810 | \$24,759,158 |
| Sevier | \$38,928,484 | \$37,486,949 | \$36,217,942 |
| Wayne | \$14,175,046 | \$13,470,241 | \$14,016,548 |
| Study Area | \$135,614,992 | \$139,296,907 | \$132,901,431 |
| Travel and Tourism Related Employment | 1998 | 1999 | 2000 |
| Garfield | 974 | 1,114 | 1,038 |
| Piute | 23 | 32 | 35 |
| Sanpete | 448 | 441 | 458 |
| Sevier | 680 | 673 | 671 |
| Wayne | 249 | 242 | 260 |
| Study Area | 2,374 | 2,502 | 2,462 |
| Local Tax Revenues From Traveler Spending¹ | 1998 | 1999 | 2000 |
| Garfield | \$1,158,228 | \$1,290,950 | \$1,166,852 |
| Piute | \$27,292 | \$37,069 | \$39,390 |
| Sanpete | \$532,516 | \$511,034 | \$514,827 |
| Sevier | \$808,824 | \$779,916 | \$754,234 |
| Wayne | \$295,878 | \$280,473 | \$292,301 |
| Study Area | \$2,822,738 | \$2,899,443 | \$2,767,603 |

Source: Utah Division of Travel Development, Department of Community and Economic Development; 2001 State and County Economic and Travel Indicator Profiles.

Table 12-2. Richfield Field Office Recreation Visitation (FY 1999 – FY 2001)

| Activity | Oct. 1998 – Sept. 1999 | | Oct. 1999 – Sept. 2000 | | Oct. 2000 – Sept. 2001 | | Oct. 2001 – Sept. 2002 | |
|--------------------------|------------------------|---------------------------|------------------------|---------------------------|------------------------|---------------------------|------------------------|---------------------------|
| | Participants | Visitor Days ² |
| Backpacking | 46,481 | 231,035 | 52,452 | 262,514 | 72,368 | 74,079 | 54,754 | 56,338 |
| Camping | 64,026 | 64,707 | 71,088 | 70,957 | 128,418 | 125,787 | 98,951 | 96,285 |
| Climbing (Mountain/Rock) | 1,665 | 439 | 1,894 | 473 | 2,122 | 583 | 1,514 | 414 |
| Driving for Pleasure | 132,377 | 47,265 | 148,694 | 53,496 | 156,429 | 73,151 | 129,200 | 55,149 |
| Environmental Education | 420 | 247 | 210 | 107 | 2,320 | 800 | 1,769 | 639 |
| Fishing (Freshwater) | 16,915 | 3,406 | 23,705 | 5,097 | 26,815 | 5,890 | 28,075 | 6,215 |
| Gather Non-Comm. Prod. | 4,935 | 1,234 | 4,975 | 1,244 | 4,885 | 1,221 | 4,825 | 1,206 |
| Hiking/Walking/Running | 27,590 | 4,103 | 24,192 | 4,025 | 80,699 | 42,967 | 62,744 | 31,152 |
| Horseback Riding | 5,225 | 1,578 | 5,173 | 1,472 | 4,905 | 1,026 | 4,825 | 1,005 |
| Hunting - Big Game | 17,977 | 42,528 | 21,398 | 48,876 | 22,364 | 15,878 | 18,684 | 12,240 |
| Hunting - Small Game | 9,870 | 2,056 | 9,950 | 2,073 | 9,770 | 2,035 | 9,650 | 2,010 |
| Hunting – Waterfowl | 410 | 68 | 800 | 133 | 990 | 165 | 1,055 | 176 |
| OHV (ATV) | 20,524 | 3,614 | 25,893 | 4,465 | 75,751 | 29,652 | 60,945 | 22,254 |
| OHV (Cars/Trucks/SUVs) | 19,882 | 17,464 | 20,733 | 19,696 | 76,600 | 43,785 | 58,804 | 31,954 |
| Pack Trips | 1,677 | 2,294 | 1,913 | 2,605 | 2,076 | 2,078 | 1,478 | 1,476 |
| Picnicking | 41,170 | 3,914 | 43,557 | 4,103 | 112,439 | 9,811 | 81,422 | 7,213 |
| Power Boating | 6,270 | 1,045 | 7,580 | 1,263 | 8,110 | 1,352 | 8,290 | 1,382 |
| Rockhound/Mineral Coll. | 3,308 | 827 | 3,787 | 947 | 4,128 | 1,032 | 2,951 | 738 |
| Row/Float/Raft | 1,654 | 13,231 | 1,894 | 15,149 | 2,064 | 2,069 | 1,476 | 1,476 |
| Snow Play (General) | 4,935 | 823 | 995 | 166 | 977 | 81 | 965 | 80 |
| Swimming/Water Play | 6,690 | 969 | 8,400 | 700 | 9,125 | 760 | 9,360 | 780 |
| Target Practice | 9,870 | 823 | 9,950 | 829 | 9,770 | 814 | 9,650 | 804 |
| Viewing (Wildlife) | 39,062 | 6,014 | 44,173 | 6,840 | 46,832 | 7,356 | 41,131 | 5,897 |
| Viewing (all other) | 16,861 | 1,351 | 15,691 | 1,306 | 16,228 | 1,373 | 14,732 | 1,203 |
| Other | - | - | 100 | 83 | 117 | 141 | 104 | 106 |
| Total | 499,794 | 451,035 | 549,197 | 508,619 | 876,302 | 443,886 | 707,354 | 338,192 |

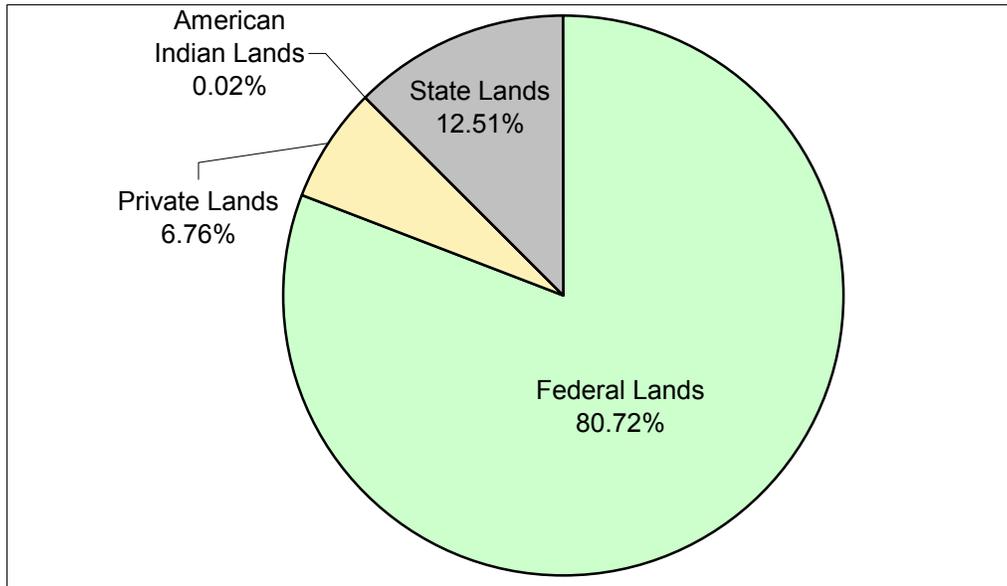
Notes:

¹Recreation estimates prior to FY 2001 were feared inaccurate. Methodology for FY 2001 RMIS estimation was improved, resulting in significantly lower *visitor day* estimates for the RFO in 2001. Large declines in visitor day estimates between 2000 and 2001 may be the result of a change in estimation methodology.

²A recreation visitor day is equivalent to 12 hours of participation in a given recreational activity.

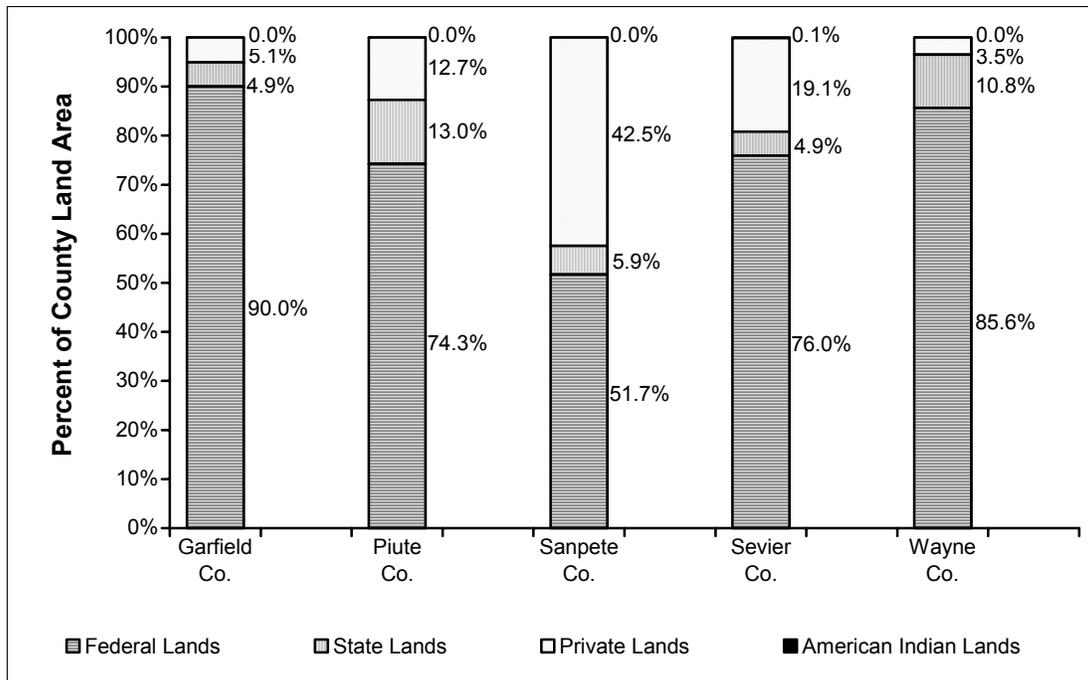
Source: Bureau of Land Management, Recreation Management Information System

Figure 1-1. Land Ownership in the Economic Study Area, 1999



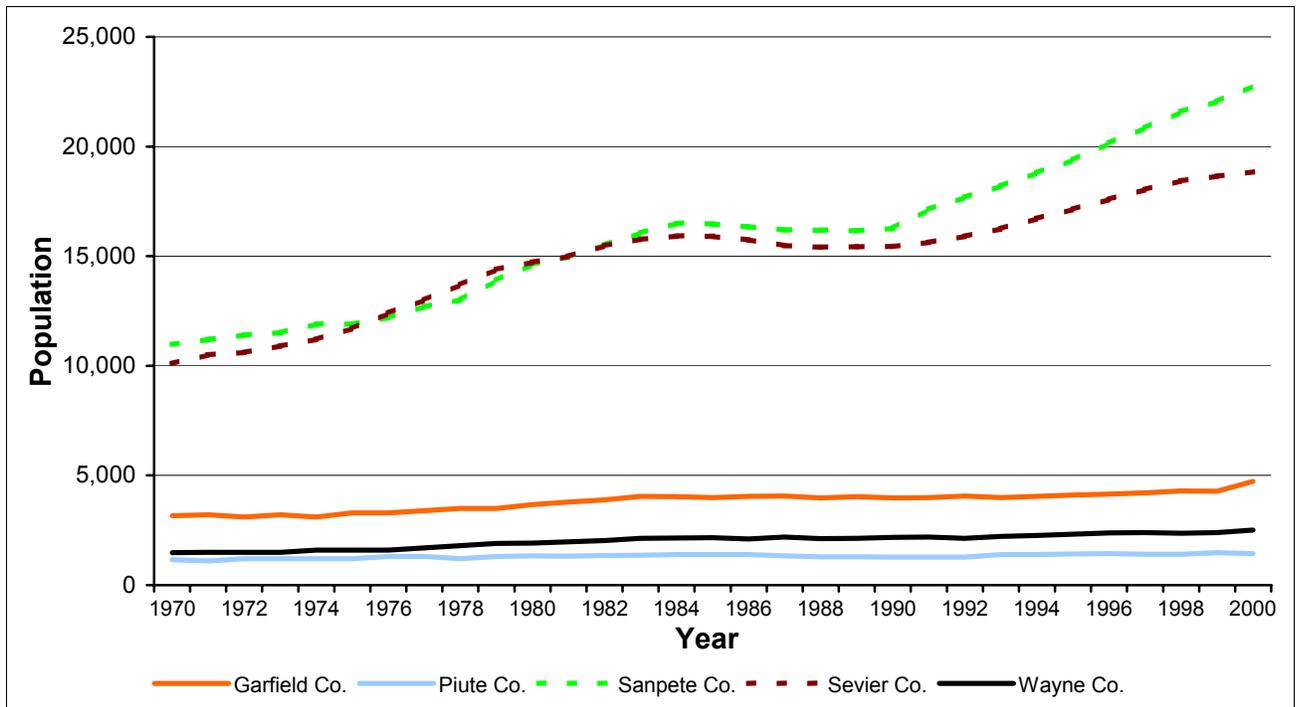
Source: Utah Division of Travel Development, Department of Community and Economic Development, 2001 State and County Economic and Travel Indicator Profiles

Figure 1-2. Land Ownership – By County, 1999



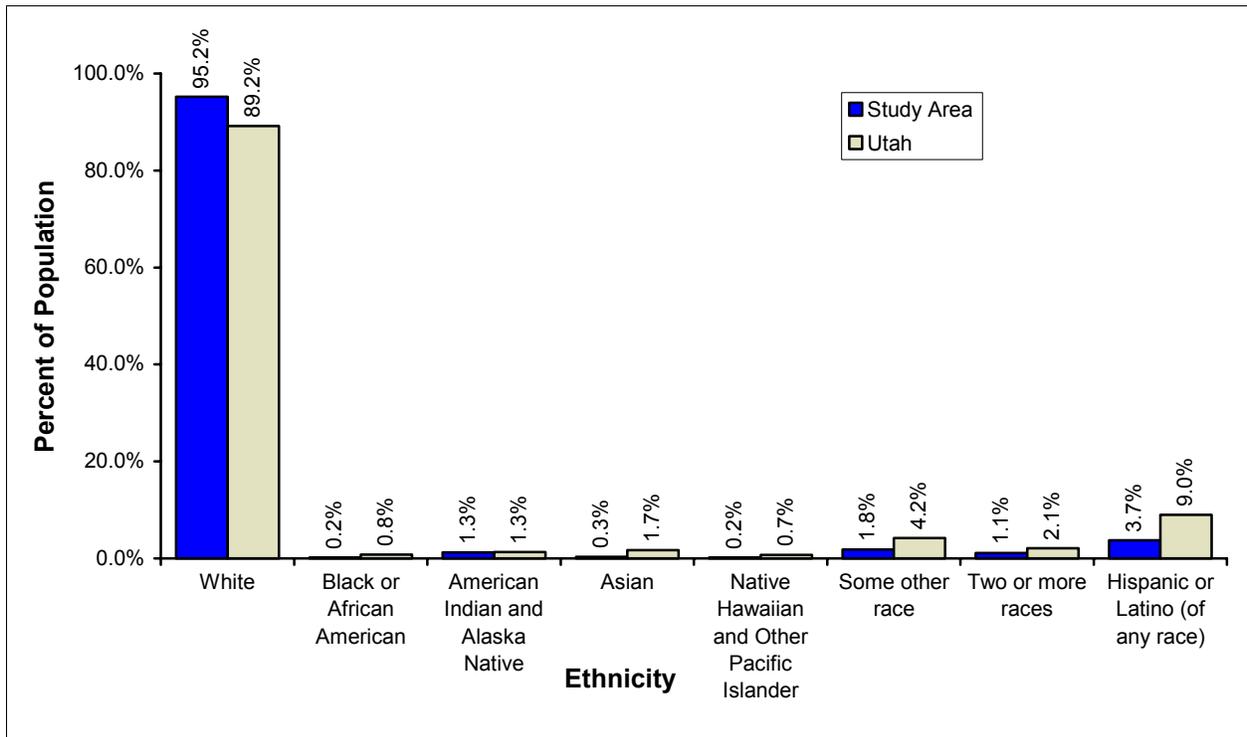
Source: Utah Division of Travel Development, Department of Community and Economic Development, 2001 State and County Economic and Travel Indicator Profiles

Figure 1-3. Population Estimates, 1970 - 2000



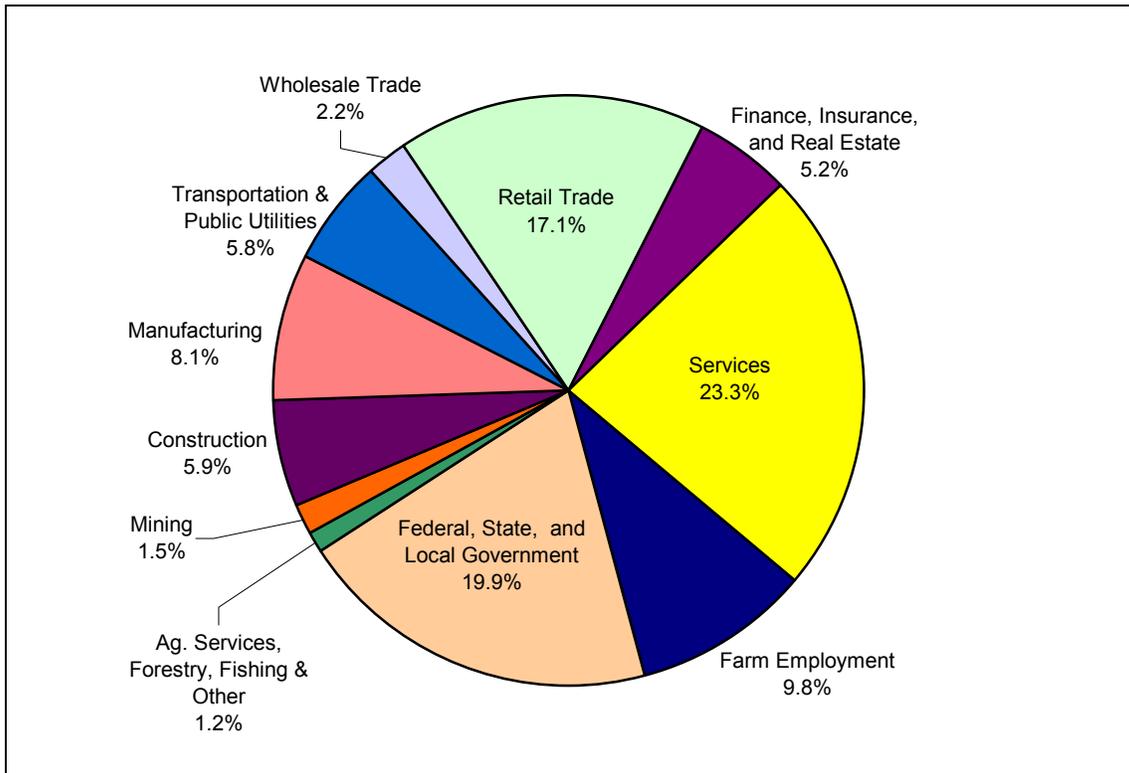
Source: U.S. Census Bureau, Population Estimates Archives

Figure 1-4. Ethnicity, 2000



Source: U.S. Census Bureau, Census 2000

Figure 1-5. Employment by Industry, 2000



Sources: U.S. Department of Commerce, Bureau of Economic Analysis, Regional Accounts Data, Table CA25 (Total Full-Time and Part-Time Employment by Industry), for the years 1980, 1990, and 2000; Sonoran Institute EPS.

Figure 1-6. Trends in Total Full-Time and Part-Time Employment by Industry, 1990-2000

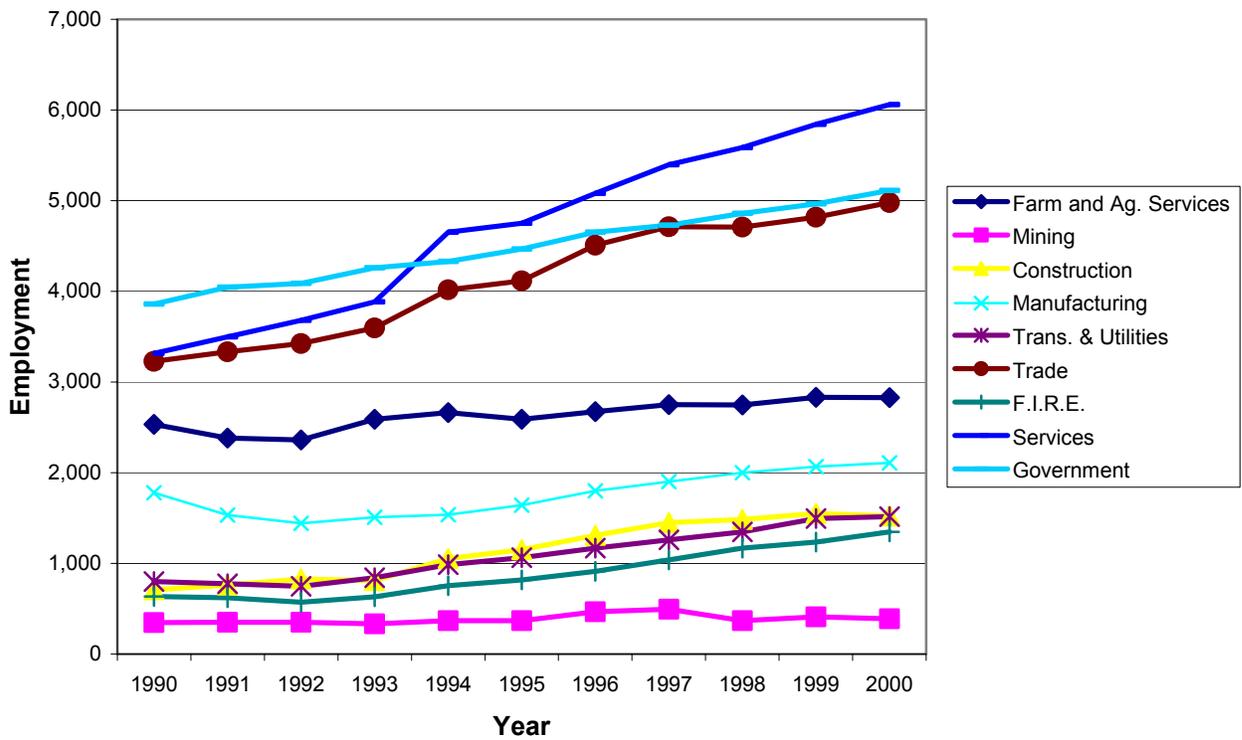
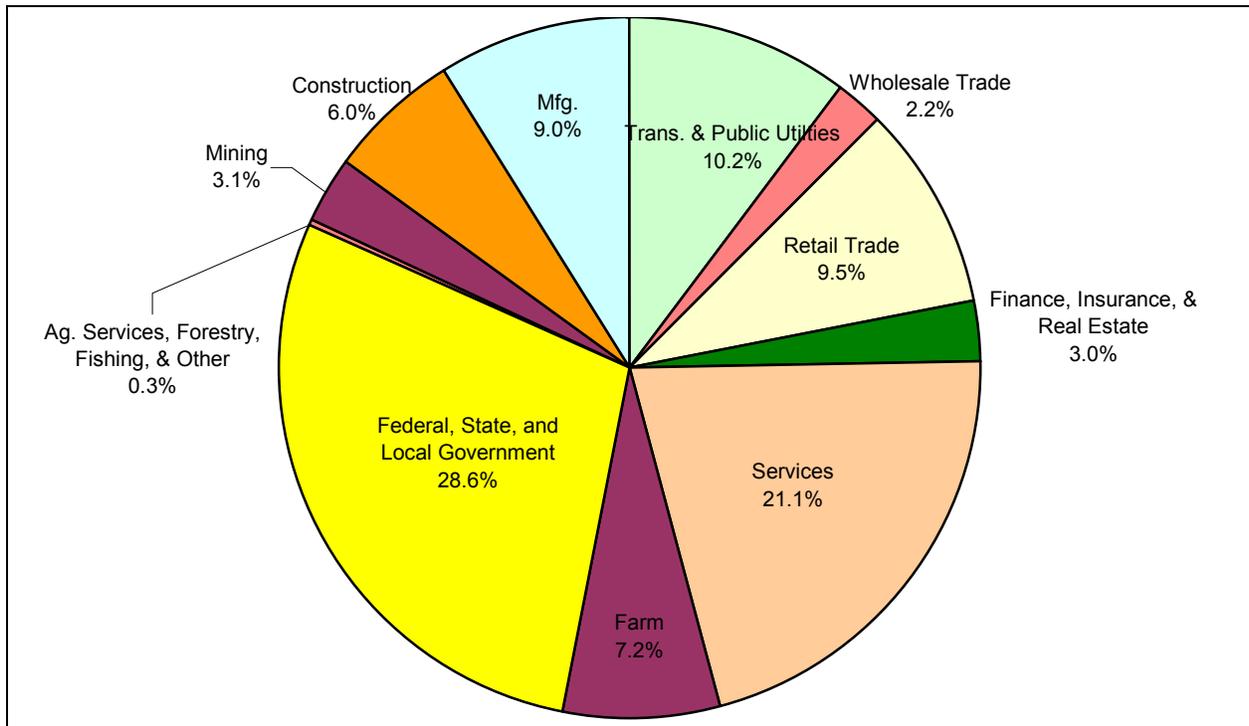
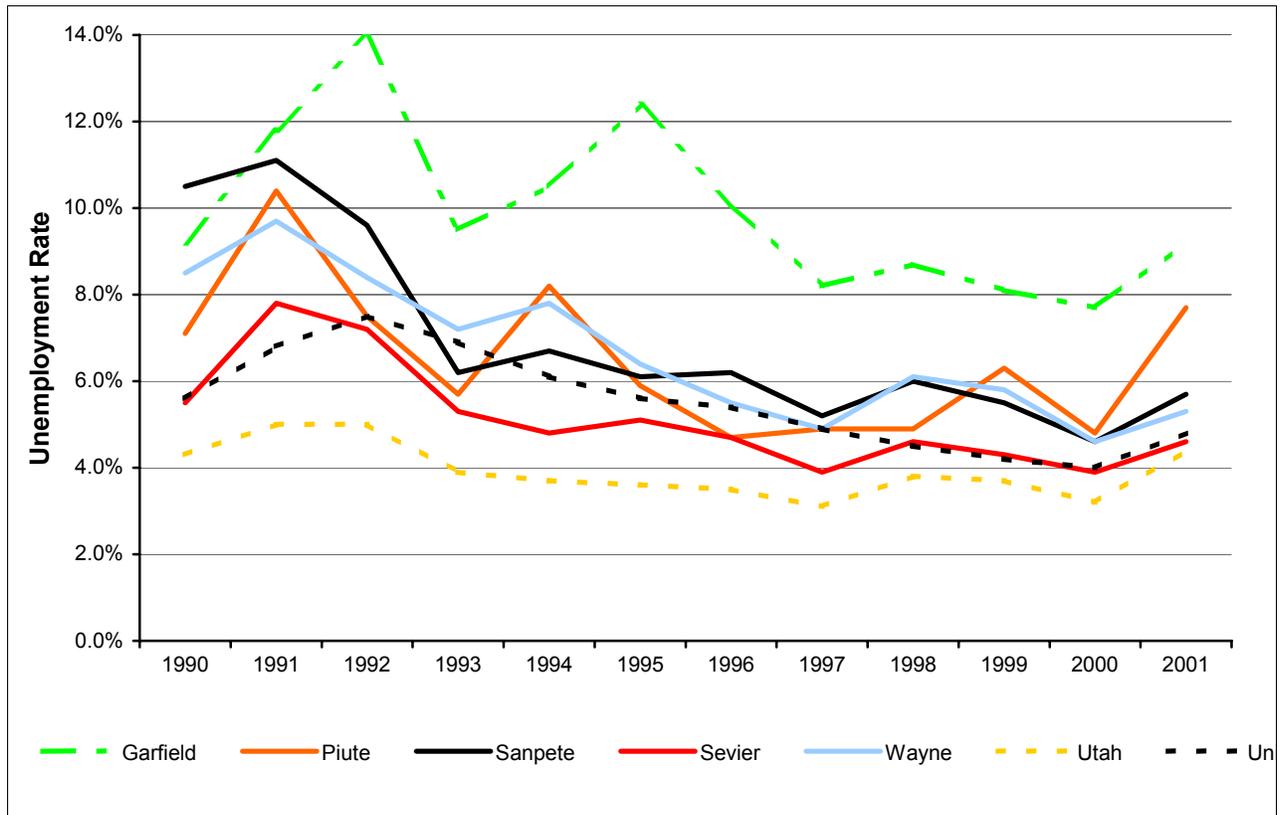


Figure 1-7. Percentage Labor Earnings by Industry, 2000



Sources: U.S. Department of Commerce, Bureau of Economic Analysis, Regional Accounts Data, Table CA05 (Personal Income by Major Source and Earnings by Industry) for the years 1980, 1990, and 2000; Sonoran Institute EPS.

Figure 5-1. Unemployment Trends, 1990 – 2001



Source: U.S. Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics

Figure 6-1. Personal Income Trends in the Economic Study Area (2002\$)

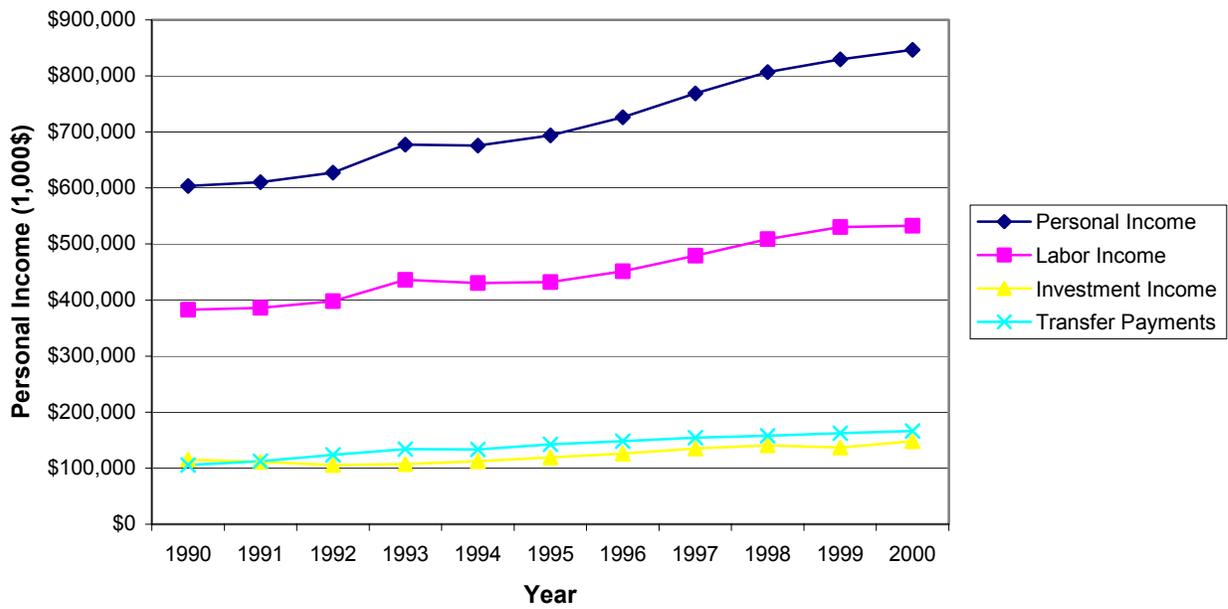


Figure 7-1. Average Earnings Per Job (2002\$)

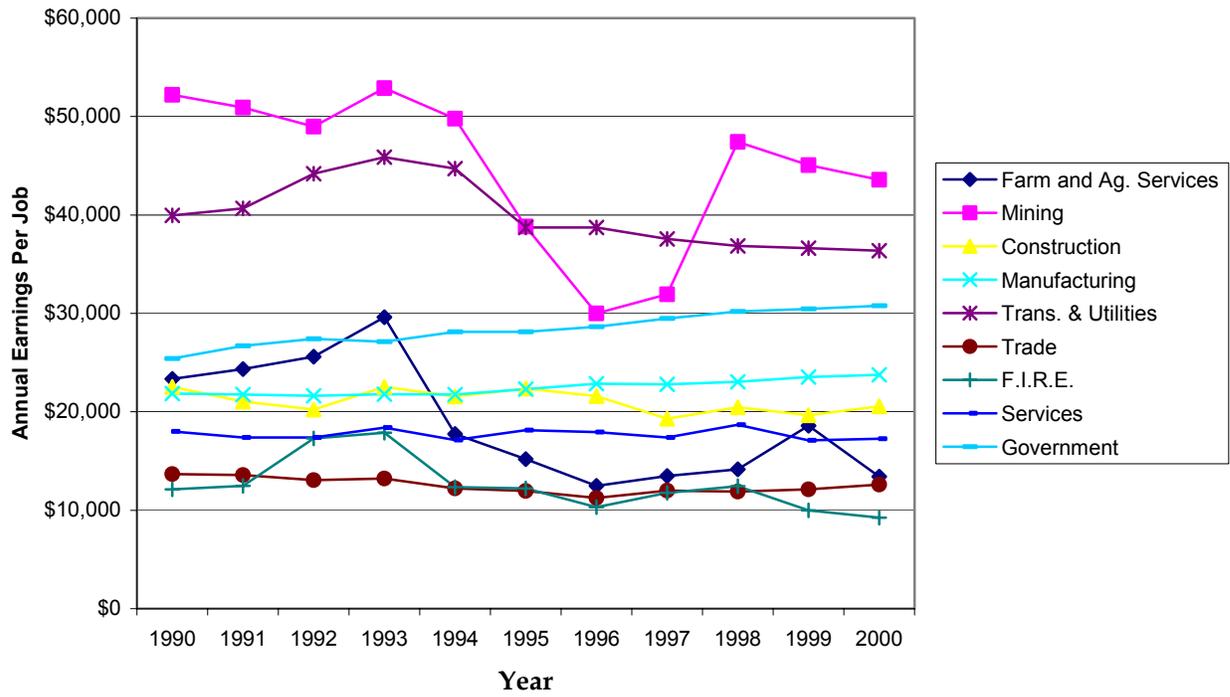


Figure 7-2. Real Gross Earnings by Industry, 1990-2000 (2002\$)

